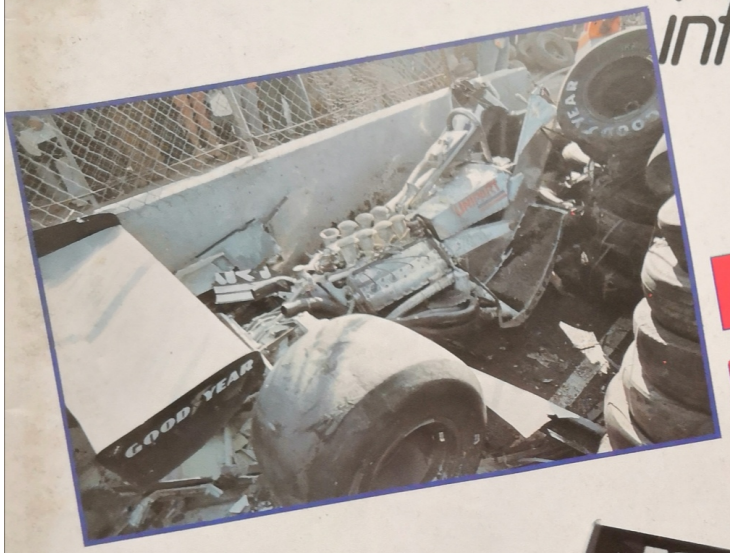
Grand Prix

international



LONG BEACH

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N°17 APRIL 8, 1980 GREAT BRITAIN 85 p - CANADA $ 2,95.

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Grand Prix

N°18 (BELGIUM) WILL BE ON SALE ON MAY 13.

185.000 copies of this issue have been published.

WHEN RACING COMES ALIVE

There are many tremendous features to California, and yet it also seems slightly antiseptic and unnatural. The sky is too blue and too pure, the light is too clear, the cars are too slow on the endless freeways, the town of Los Angeles is too well planned, life is over-organised in case one should feel the slightest nervous tension. The circuit at Long Beach is no exception to this protected atmosphere. On the Friday, during the first day of practice, Brabham, Ligiers, Williams and Renaults were fighting for the fastest time in practice. It was what one had come to expect following previous races. It was almost monotonous in spite of the unusual setting and the superb echo of engines blasting off the town's walls and buildings.
Long Beach lacked that white heat, the infectious spark that one finds in Italy which lights up one's senses, makes one take an extra interest, increases one's curiosity and enthusiasm.
But the need for the slightly unusual was fulfilled on the Saturday. One felt the place come alive, even as events took place. It was quite a surprise to see Patrick Depailler qualified third on the grid and Jan Lammers fourth. Reputations had been overturned, new ones built, the monotony had disappeared. The second row of the grid brought fresh and welcome talent to the front of the pack. Destiny had winked at Formula One. The racing had quickly come alive and intensely so.

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IN THE COCKPIT

Candy

IT'S odd the things that go through a driver's head before a race. Strangely enough, to my impatience and the fear of doing badly — both quite normal and usual feelings an hour before a race — was mixed an apparent sense of frustration. I'll explain myself.

I knew that my car was capable of being on the front row of the grid. If I'd gone for a time early in the session when the track was at its quickest, and if I'd had another set of qualifiers I would have been there : front row, or not far off it.

Lots of drivers would improve their practice times with a few ifs. Personally, I was certain of it. It would have been the first or second row for sure. And that would have made things a lot simpler. I would have been able drive without worrying about the others. Unfortunately my bad position on the grid meant that I was affected by things beyond my control, I was affected by other cars. In other words, the Alfas or Renaults which were heavier with more fuel, could slow down the rest of the field, and I was part of the rest of the field. Who knows, I might have been able to stay with Piquet's Brabham otherwise.

It often happens in Formula One that one's place on the grid corresponds neither to one's own potential nor to that of the car. The point of practice is to allow the drivers to set up their cars, but also to determine the starting grid, although it doesn't always represent the correct order. Generally speaking, the grid isn't far from the truth, but exceptions are numerous. At Kyalami for instance, my position on the grid simply didn't reflect my car's capabilities because I broke down during the second session. I therefore had to overtake a lot of cars during the race, and set fastest race lap of the non-turbo cars. Unfortuntely I picked up a puncture so my bad position on the grid wasn't that important because my race was basically finished anyway because of the puncture. But imagine if everything had gone right, I would have been battling for second place with the Ligiers. But in fact that had been virtually impossible right from before the start because of my poor qualifying which had meant that I lost contact

with the Ligiers immediately the green light went on. Having said, the race is long and I was able to catch and overtake a lot of cars. But there are some circuits where a race like that is impossible, because one can't overtake. Monaco's like that, Zolder is the same, and most of all, Long Beach. So the race is dictated by grid position. That's really a shame, and that's why I was feeling frustrated before the Long Beach race. My car goes well yet it didn't have the slightest chance of proving its worth because I was starting from the sixth row of the grid.

So if the aim of practice is to determine a grid according to performance, why doesn't it always turn out right ? Quite simply because there are disparities from the start. The same number of qualifying tyres aren't allocated to each car, not everyone has some form of mechanical breakdown. One can hit the Armco and slightly derange the suspension, then climb into the spare car and compare it to your teammate's. In fact there are all sorts of possibilities in racing. Teams often find themselves much further back on the grid despite their potential. That certainly causes tremendous climbs back through the field on occasions, but not at Long Beach or Monaco because it simply isn't possible.

On Sunday morning I was worrying about what sort of conditions I was going to find myself in. Maybe someone would hit my car ? ***(Which is exactly what happened — Ed.).*** Would everything go OK during the opening laps ? ***(A worry that was completely justified — Ed).*** I found that very frustrating. All that because practice hadn't revealed the proper order for the grid.

I'm not, however, one of those people who want practice to last for a long time. That would simply allow too many cars and too many drivers to set very similar times because the would simply lap and lap and lap. That would simply lessen the times between car and driver combinations. I would prefer practice to be very short.

So, I want two very different things. I want practice to be very short in order to favour drivers that adapt quickly to circuits. And I want practice to determine the correct order for the grid. That's a strange paradox. I want a short practice on one hand, and a long one on the other. Nevertheless, if I have to chose between the two, I would prefer practice to be very short. The system of having four sessions is fine but they should be shortened, especially the morning sessions. I don't see why we drive for an hour and a half using up tyres and putting miles on the engine. That simply favours the wealthier teams who have lots of tyres and engines, and penalises those who have lesser means.

But at least qualifying tyres are no longer part of the Grand Prix scene. That's one improvement. Everyone will be on equal footing as it were. At least that disparity has been ironed out. Grids will instantly be closer to the actual truth.

Jean-Pierre Jarier

VZW. F1 ZOLDER

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Acces au paddock et aux enceintes
Zutritt zum Fahrerlager und Zaun
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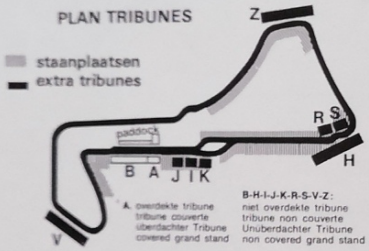
Acces aux tribunes et aux enceintes
Zutritt auf Tribunen und Zaun
Access on the grand stand and enclosure

PLAN TRIBUNES



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Donderdag-jeudi : 1.5.1980
10.00 u. - 11.30 u. : **pre-qualification-practice F1 (untimed)**
14.00 u. - 15.00 u. : **pre-qualification-practice F1 (timed)**
15.30 u. - 17.30 u. : promotie-oefenritten

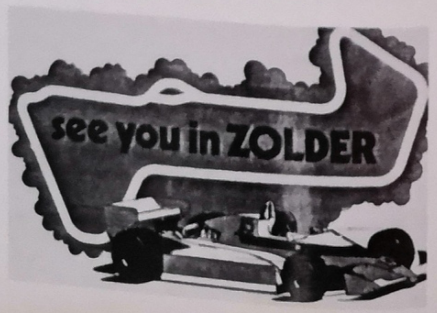
Vrijdag-vendredi : 2.5.1980
10.00 u. - 11.30 u. : **F1-practice : 1° session (untimed)**
13.00 u. - 14.00 u. : **F1-practice : 2° session (timed)**
14.30 u. - 18.00 u. : promotie-oefenritten

Zaterdag-samedi : 3.5.1980
10.00 u. - 11.30 u. : **F1-practice : 3° session (untimed)**
12.00 u. - 13.15 u. : promotie-oefenritten
14.00 u. - 15.00 u. : **F1-practice : 4° session (timed)**
15.30 u. - 18.00 u. : promotie-races.

Zondag-dimanche : 4.5.1980
09.30 u. - 11.00 u. : promotieraces
11.30 u. - 12.00 u. : **F1-Free-Practice**
12.15 u. - 13.00 u. : promotierace
13.15 u. - 14.15 u. : show en voorstelling F1-piloten
14.30 u. : warm-up laps F1
15.00 u. : **Start F1-race (72 ronden)**

PROJEKT KALENDER 1980

8-9 maart : Belgian Marlboro Cup
22-23 maart : Bergischer Löwe : Deutsche Rennsport Meisterschaft (D.A.R.M.)
19-20 april : Grote Prijs van Zolder - Europees Kampioenschap F3
1-2-3-4 mei : Grote Prijs van België - Formule 1
14-15 juni : Motorraces (O.V.)
21-22 juni : Grote Prijs Du-ren - Europees Kampioenschap F2
6 juli : Motorraces (O.V.)
9-10 augustus : European Historic Grand Prix - OLD TIMERS
23-24 augustus : Westfalen Pokal Rennen (D.A.R.M.)
13-14 september : Bekers der Toekomst
27-28 september : E.G. Trophy - Europees Kampioenschap Speciaal Toerisme wagens Gr.2 - Trofee Trans Europe
11-12 oktober : Saisonabschlussrennen



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The paddock in Long-Beach

THEY SAY THAT...

• Gilles Villeneuve has already signed for Ferrari for 1981. Ferrari no doubt know that Gilles's services are much sought after, so they've signed him up nice and early.

• What's to become of the Shadow team ? Don Nichols still hasn't found a sponsor to put his team onto a reasonable footing. The team could be bought, not because the material is valuable, but because it is a member of FOCA.

• It seems the South African Grand Prix in 1981 is threatened because Bernie Ecclestone lost a lot of money at the Kyalami Grand Prix a few weeks ago.

• A new Alfa Romeo engine is scheduled to appear at Zolder, the next round of the World Championship. The main characteristic of this engine will be a lower centre of gravity.

• According to the Swiss magazine Motor Sport Aktuell, Mario Andretti wants to get out of Formula One and swop places with the rising American star, Rick Mears.

• This same Mears tried a Brabham BT 49 for the second time at Riverside recently, having first driven the car at Le Castellet. And Mears turned out to be quicker than Long Beach winner Nelson Piquet. The Brabham team were naturally impressed and want to run him as from the French Grand Prix. Zunino says his contract is for the year, so...?

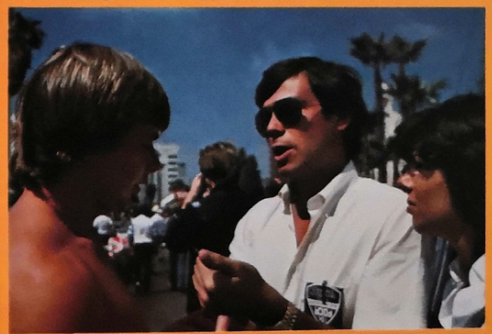
IS FISA REALLY WORRIED?

• On returning from the United States, journalists must have been impressed by the fact that FISA haven't ignored recent accidents in Formula. One at the last two Grands Prix.

They sent out the following press communique : *« Following the recent accidents that took place during the US Grand Prix West and the conditions under which they took place, FISA has opened an enquiry to establish whether the safety rules have been respected. Furthermore, FISA considers that the accidents and injuries to M. Surer and A. Prost at Kyalami and C. Regazzoni at Long Beach demand a rapid programme to reinforce strength around the cockpit and the car as a whole, which is perhaps sacrificed by some constructors for greater speed.*
« Consequently, the safety committee, the technical committee and the Formula One committee are to hold extraordinary meetings in order to discuss various necessary measures which will have to be presented for decision to the executive committee of FISA on April 15 at Rio. »
All that is very laudable and cannot be criticised. But note that FISA have already taken similar steps, for a few weeks ago they concentrated on safety but it hasn't apparently been followed up. We remind you that at that time, the decision to ban skirts from January 1, 1981 was taken. *« The Constructors, »* said the communique, *« have six months in which to build their new cars. »* More than a month has since passed without any further comment. Most designers have said that with such imprecise wording, it wouldn't be difficult to find a way round which will compensate for the absence of skirts. To say that one must take off skirts is one thing, but it has to be followed up with precise instructions. Let's hope that the press statement above is followed up by more concrete and positive regulations.

PATRICK TAMBAY ANNOUNCES HIS RETURN

Patrick Tambay was at Long Beach for the Grand Prix, in between skiing with Teddy Mayer and a holiday in Hawaii with his parents-in-law. *« I'm staying in the United States this year, »* explained the Frenchman. *« I'm going to do CanAm for Carl Haas. I decided last winter that I would give the 1980 Formula One season a miss and take a breather in order to restore my physical and psychological condition and morale. I'm going to use the 1980 season to prepare myself as well as possible for a come-back in 1981 when I shall have determination, expectations and new goals. »*
Patrick is currently reckoned to be one of the men most likely to drive a Talbot. He has two and a half seasons of experience and would no doubt accept the fact that he might have to miss the first Grands Prix of next season. He might consider that period of testing in the same manner as Jabouille accepted a similar period at Renault. Furthermore, one of Neerpasch's assistants will be the Frenchman Hugues de Chaunac for whom Tambay has already driven in Formula Two. Talbot have also stated their intention to run a French driver. Tambay would appear to fulfil all the conditions.



MEET KEITH DUCKWORTH

Keith Duckworth is the « father » of the Ford Cosworth engine but he sees the introduction of turbo engines under current regulations not only as a threat to the costs of motor racing, but also to its worldwide attraction. Duckworth has devised his own fuel flow Formula, and we spoke to him about it at Long Beach.

« I'm not worried about turbos in Formula One, but the existing Formula does mean that it is possible to make a 750 horsepower 1.5 turbo engine which would obviously be a very complicated unit. The main fear that I have is that any engine fashion change that could make existing engines useless could cause there to be such a scarcity of engines in Formula One that the Formula might collapse or

would reduce the number of competitive cars to such an extent that the spectacle would vanish. I do feel that the turbo engine is the engine of the future, but a turbo road car engine of the future will bear very little resemblance to a very heavily blown 1.5 litre running at very high revs that will be necessary if the current Formula One regulations continue. Because the one current turbo engine is only running against normally aspirated engines, it bears no resemblance to the turbo engines that will be developed when several people are competing with turbos. »

— So what is your solution to the problem ?

« It is to change to a fuel economy formula. I'm designing a suitable restrictor valve to allow racing with a fuel flow of something like 27ccs per second. Engines would have a minimum of six cylinders, or, as someone has suggested, a maximum capacity of 500cc per cylinder. I feel that at somewhere between 27 and 32ccs per second we will get between 430 and 500 horsepower. I think that the ideal engine under my Formula will be something like a three litre six cylinder turbocharged engine, but it will only be running at 5-7000 revs. Instead of the current chasing of useless power per litre of engine capacity, we will be chasing power per cc of fuel. »

— Would the Cosworth V8 no longer be used ?

« If this Formula is accepted, my engine will undoubtedly be a turbo engine. I think that as a temporary measure we could fit a turbocharger to our existing eight cylinder and hope that it is usable for two or three years until we can gradually introduce an engine designed for those rules. Several members of FISA have agreed with them in principle, but no-one it seems, is keen to make any decisions at present. FISA would like to see a demonstration of the fuel flow metering device in action and we at Cosworth are working on one now. »

NELSON'S VICTORY

Gordon Murray deems him a worthy successor to Niki Lauda, more for his approach to racing than his position within the Brabham team this year. Nelson Piquet was faultless at Long Beach. And his victory seemed completely logical, in retrospect. Because not everyone believed it. So Nelson had confirmed his talent, and had begun his bid for the title. His career has just taken off.

by Eric BHAT

IT'S Friday morning, there's the usual pre-Grand Prix atmosphere. It's that moment of peace and quiet twenty minutes before the start of the first practice when everything suddenly grinds to a halt. Everyone is ready, but nothing has actually started yet. Nelson Piquet is to be found by his car, somewhat asbtract. He prepares his helmet, his gloves. Waiting. *« Well Nelson, you've got the car with which to win ? »*. The Brazilian smiles. This half-question, half-guess produces a similar reply. *« I have a car that can win, but the driver, I'm not sure about him. »*

Deep down, certain people felt the same, as perhaps did some drivers, when Nelson Piquet took pole position during the final qualifying session. Nelson might be the number one Brabham driver, but he's still one of the youngsters when it comes to the Grand Prix circus. People doubted whether he had the experience and precision to win on a circuit which is so demanding, and where the slightest mistake is rewarded with a collision with the concrete. The mistakes Nelson made during the early laps of races last year came springing to mind, although he could be excused because he was tackling his first Formula One season, and he did have a handicap for the Brabham was difficult to drive because of the full fuel tanks needed to supply the thirsty Alfa Romeo engine.

And of course, one doesn't lend to the rich, as much because of tradition as lack of thought. After all, Nelson still had to prove himself. He had only a few good results to show for himself : second at Argentina, and two fourth places, Holland in 1979 and Kyalami in 1980. They scarcely made him a potential winner, even though he'd set the fastest practice time.

But not everyone thought that way. Even before he'd proved himself in California, Nelson Piquet was well thought of by some very astute people. Jackie Stewart told us at Montreal last year that he reckoned Nelson to be one of the three or four best drivers at the time.

Another discerning fan of Nelson's is the man who knows him as well as anyone, and really backed him on the eve of the race. It's scarcely possible to find anyone more qualified to talk about Nelson than Gordon Murray, the Brabham designer. He knows Nelson well as a driver, but also as someone who sees him almost daily not only at circuits but in the Brabham offices and design studios.

The fact is that Nelson doesn't simply his involvement to getting into the car, driving, describing how it's going, and then getting out again until the next session or Grand Prix. Nelson has made a habit of following through every stage of development that results either from his own observations when driving or from Gordon Murray's ideas. This is as much for interest's sake as for his own desire to see it work. Last year we dropped in on the Brabham people unexpectedly and had proof of Nelson's interest. He was wandering around the offices looking relaxed as though he worked there too. In effect, he was at home.

Because of their collaboration and the way they work together when Murray modifies a part, or Nelson drives in a test session, a deep respect has formed between the two men. The most famous of this type of partnership was that between Clark and Chapman, and Stewart and Tyrrell had the same sort of success. These are past and legendary partnerships. A significant partnership of the future is that of Piquet-Murray, and they've just scored their first success together.

This has been the situation for some months now. Even in South Africa last year, which was only four months after Piquet signed the Brabham contract, Murray told us what he thought of Ecclestone's new recruit. *« He has a very intelligent and mature outlook with regard to his job. He's very analytical, his com-*

The determined yet impassive face of a man who is destined for stardom.

ments are clear and precise. He reminds me of Lauda in a number of ways. »
The former World Champion was at that time the number one driver in the Brabham team, but spent less and less of his time driving and testing the cars. So Nelson spent more and more of his time undertaking the responsible task of test driver. He settled in easily, although it was an unexpected opportunity at his stage of his career. His availability and obvious technical ability pleased Murray. Designer and driver had mutual respect for one another.

LONG Beach was their joint reward. Besides, Murray had been waiting for such success for a long time. Since the introduction of wing-cars, the Brabham designer has endeavoured to find the best solution, come up with original ideas and continually developed his cars search of optimum ground effect.
Brabham's last Grand Prix win was in 1978. Once more, there was no doubt about it for Lauda won with the famous fan car in Sweden, and in Italy he won again when Andretti and Villeneuve, who finished in front of him, were disqualified. Murray's first real wing-car, the BT 48 powered by Alfa Romeo, appeared in December 1978 at Le Castellet. Various versions followed, succeeded by the Cosworth-powered BT 49. Murray was still optimistic. But promise shown during the previous months still had to be fulfilled.
Now that promise has been fulfilled, in a way that couln't be more certain. Piquet's pole position was followed by an unchallenged drive to the chequered flag.
Nelson Piquet and Gordon Murray knew that they were going to have a lucky weekend as early as the first day of practice. First of all Nelson spent a great deal of time trying the BT 49 which was fitted with the new Weismann gearbox. When he got into his own race car, he lacked time to sort it out for the circuit. But Nelson was still confident. *« When I realised that the car was understeering, it was too late to correct it. But I'd still been quickest in practice for a while. I knew that the car was very good and very quick. »*
Nelson spent the Saturday morning session setting up his car, and then took pole position during the afternoon by the considerable margin of almost a whole second. *« I set my time with my second set of qualifying tyres. I drove really hard, missing the walls by a few centimetres. »* The Brazilian did his thing at the most opportune moment, when the track was at its fastest. But it's worth noting that once the track was slower, Nelson still set the quickest times, proof that this pole position wasn't simply luck.

IT wasn't that great a surprise to see the Brabham BT 49 doing well. Since it first appeared in October last year, this narrow white and blue single seater has always been competitive. It should have finished third in Montreal. It was on pole position at Watkins Glen. This season, Piquet finished in second place at Buenos Aires, and then fourth at Kyalami. It's light, manœuvrable and well balanced. The BT 49 seemed to be good on the fast circuits at the beginning of the year. Now it would seem to have a considerable advantage, it's proven itself quick on all types of circuits.
On the eve of the Grand Prix at Long Beach, Nelson Piquet knew that he had a good car with which to defend his chances. All the same, he wasn't overconfident. *« The main danger could be the brakes, »* he predicted. *« The race is long. I'm going to have to watch the brakes, and make sure I don't over-use them. »* Wasn't Nelson worried that he might make a small mistake which would be disastrous on this circuit ? *« I'm surprised I didn't spin at all during practice, »* He said. *« I didn't touch the wall once, nothing. »* He winked and added : *« maybe I'll manage it tomorrow. »*
But he didn't. Piquet had a faultless run and never lost control of the race. He chose the best tyre, type A which is very hard and tough, yet turned out to be just as competitive as the B type which most of his competitors were using. Even though they were hard, Nelson's car held the road well and he was even able to lift off at the end, such was his leading margin.

SO the Brabham team can now be added to those of Williams, Renault and Ligier as possible World Championship winners. The English team have rediscovered reliability which evaded them last year because of the aggravating agreement with Alfa Romeo. The BT 49 is quick. Piquet has proved that he's mature and capable of a faultless race. If he can continue to drive as he did in Long Beach, he could well end up World Champion at the end of the year. But Nelson is entering a new phase of his career, one in which he's got to learn to keep his head. The presence of the calm and calculating Gordon Murray at his side is one that will help him. But concentration seems to be Nelson's strong point. It seems to intensify as the race approaches. His face becomes set and pale as he gets ready. It's obvious that Nelson is already into his race.
Strangely enough, this Californian win provoked scarcely any outburst of enthusiasm within the English team, simply contained satisfaction. *« Gordon ! »* Ecclestone's voice was hoarse and almost aggressive, as though to hide his emotion. Smiling, Gordon waited for his car to return to the pits and took no notice of the shout. *« Gordon ! »*. This time he answered his name. The two men shook hands forcefully, a gesture that was charged with congratulation and thanks on Bernie's part. The Brabham boss could now be satisfied. Having exercised his control of Formula One politics, he was now in a position to control the competition as well, which isn't easy to accomplish. □

Brabham now Renault and Ligier among the favourites for the World Championship. At Long Beach, the BT 49 was the car to beat.

REGAZZONI : A DRAMATIC GOODBYE ?

Long Beach had been good to Clay Regazzoni. The Californian circuit had been the scene of one his greatest Formula One wins, four years ago. And this year, Clay was going well, as well as he'd gone all year, fighting for fourth place. But his enormous accident has almost certainly brought his long and fruitful career to an end. Today, his greatest battle is for his health and recovery.

by Mario LUINI

THE sun was shining at Long Beach, lighting up the wide streets of the Californian port. The bright sunlight played on the shining racing cars as they battled for position. The survivors of a troubled race set out on their 51st lap at one hundred miles an hour around town. Thanks to the high rate of retirement, the two occupants of the back row of the grid, Clay Regazzoni and Emerson Fittipaldi were at that time fighting over fourth place.

They flicked through the S-bend down from Linden Avenue, then came the long fast left-hander, then the hairpin, followed by the long straight along Shoreline Drive. The speed reaches nearly 175 mph, and at the end, there's a tight hairpin which requires really hard braking.

But wait, the pretty red, white and blue Ensign's nose cone doesn't dip as usual under braking. There's just time to realise that before things happen faster than it takes to describe them. The patriotic racing car is heading for the escape road at 170 mph, freewheeling ! And then there's an enormous explosion of debris, dust, wheels, metal, accompanied by a dull thud. It's 3.16 pm.

Emerson Fittipaldi tells his story : *« I'd been following Clay for some time. I saw that he lost his brakes at the end of the straight. When I turned into the hairpin, I lost sight of him, but I heard an enormous crash ».* An hour after the race had ended Emerson was still upset. He and Clay had fought out a memorable World Championship in 1974, a fight that had gone right down the line to the final race of the season. *« The crash really affected me for a couple of laps, »* confided the Brazilian driver. *« It was dreadful, my legs were trembling. I couldn't drive, and I don't think John (Watson), who was behind me, could drive either. He slowed down as well. »* There are some things that drivers don't like talking about. Even so, Emerson admitted that he feared the worst for his old rival. *« Only a miracle allows one to walk out of an accident like that alive. »*

The details of the accident still aren't certain. It seems that Clay lost his brakes at around 175 mph. He probably tried to change down a gear in order to slow the car a little which is why the car passed as though it was freewheeling silently as witnessed by the spectators standing inside the hairpin. *« I could see that he was trying to spin the car in order to slow it down »,* explained Fittipaldi. *« But he was still going too fast. At that speed, there was nothing he could do. »*

Fate, luck or whatever had dictated that the escape road was blocked by the already abandoned cars of Zunino and Depailler. It is possible that those cars saved the life of the Swiss driver from Monte Carlo. Before thumping into the barrier of tyres that lined the concrete wall, the Ensign scraped its left side against the Brabham's right side. It's almost certain that this first impact is what broke Clay's left leg, but it also meant that the second impact with the wall was at around 125 mph instead of 155 mph or more.

All the same, when the Ensign hit the concrete, it pushed back the four ton block nearly two yards...

The well-built Ensign monocoque is one reason why Regazzoni was saved from the crash. Even so, such an impact against a solid wall bent the monocoque in two from the driver's hips so that his knees touched his helmet. There was practically nothing left of the car in front of the driver's knees. Amongst the pile of tyres and smoking debris one could see the little white cross on Regga's helmet. Slowly it moved from right to left. He was alive.

It took exactly 26 minutes for the rescue team to extract Clay from his uncomfortable position. Clay was conscious, although deeply shocked, but even so, he was able to speak. Then the ambulance took him immediately to the St-Mary Hospital in Long Beach, where the doctors diagnosed, among other things, a fracture of the 12th vertebrae. They had to operate. At eight on Sunday evening, they started a long and delicate operate which lasted into the middle of the night. Regga had one stroke of luck though. Some of the best specialists in that field were based in Long Beach, as Patrick Segal remarked. Segal should know. He's the French author of the best-seller « L'Homme qui Marchait dans sa Tête », the autobiographical story of someone paralysed from the waist down, and Segal was one of Renault's guests at the Grand Prix.

It's naturally too early for us to say for certain, but it would seem that Clay's 133 rd Grand Prix appearance at the US Grand Prix West was his last in exceptional Grand Prix career that started ten years ago in Holland. In fact the brave Swiss driver had already intimated that once he'd put the little Ensign team firmly on the rails, he would retire at the end of the present season and perhaps set himself up in California. At the time of writing, we don't know what Clay's reaction to the accident will be, but it seems likely that his decision to retire will be brought forward because of the crash.

And Mo Nunn won't have been able to succeed in the task that he set himself for 1980 : to win a Grand Prix with Regazzoni. At best, Nunn will have to find himself a replacement driver for the greater part of the season.

While the Long Beach track might be the scene of Regga's final race, it was also the scene of one of his best. It was in 1976, remember, when Clay was with Ferrari as second driver to Niki Lauda. Lauda wanted to win the World Championship for the second time, and Clay regularly suffered the frustration of a number two. That day, in the Californian port, the two drivers seemed to have had their roles reversed. Clay was the beneficiary of an intentional mix-up which meant that he used Niki's normal car without actually knowing it. It was a mix-up that is perhaps of little interest today but certainly Clay was superb right from the start of practice. Pole position was his aim and he won it with ease. At the same time, his rivals were in trouble, but Clay was the master that day. During the race, he was the parallel to Nelson Piquet this year : clean, calm, unhurried. His win was virtually a formality.

It must be said that Regga made even more progress. But Ferrari scarcely shook him by the hand and thanked him. He found himself suffering non-qualifications with the Ensign team in 1977, and then Shadow in 1978. It was Williams who gave him a leg-up by hiring him to run alongside Alan Jones in his superb team. Even though he had to accept that he was number two driver, his results were good, and he finished fifth in the World Championship even though his Formula One season didn't really start before the Spanish Grand Prix when the new FW07 first appeared.

However, his problems within the Williams team soon meant that he derived little pleasure in racing, so that when Mo Nunn told him that he had enough money from Unipart to build up a good team by hiring the necessary designers and mechanics, Clay was quick to accept the Ensign drive. The two of them had respect for one another, dating back to Nunn's days of struggling back in 1977. Clay could see that with the right resources, things could go well with the Ensign team. Perhaps Clay was too sensitive to his own wishes than to the actual professionalism needed to win a World Championship.

He preferred to feel at home than to remain with the team that had put him back on top. *« I prefer to be the only driver in a team that is perhaps less prestigious, less complicated and poorer in terms money, but one where I feel that everyone around me is counting on me, has confidence in me and is working for me, »* said Clay. Of Nunn, he added, *« he's never been in a position to prove his worth. »*

The second stage in their relationship had only just begun. Even so, it was fairly low-key because it had to be admitted that the little English team were very much feeling their way. But everyone could see that the new car was well thought-out and well-built, that the team comprised some well-known faces who had proved their worth elsewhere and would help the team to be competitive. It was just a matter of time before the results came. Clay himself had proven during his Williams season that he hadn't lost his touch.

Surely they would get some good results in 1980. *We haven't any excuses this year, »* Nunn had often said. *« We've everything we need to take on the best and even win. »*

On the 51st of the 80 laps of the US Grand Prix West, Regazzoni was in fourth place in front of Emerson Fittipaldi. The latter was later to mount the rostrum. The positions at that time were somewhat relative when one takes into account the number of incidents and retirements that had cleared the path for the Ensign and Fittipaldi. But Regga was heading for a good result and that would have given the Ensign team the encouragement it needed.

But fate decided otherwise. Clay Regazzoni had only had one serious accident before, at Kyalami in 1973 when he was saved from his burning BRM. Long Beach may have even more serious consequences for him... □

THE FILM OF THE RACE

Strangely enough, it was the enormous number of retirements during the United States Grand Prix West that really stopped it from becoming monotonous. The race for the lead was non-existent. Nelson Piquet was a clear and tidy winner, leading from flag to flag, and no-one was able to give him any trouble. Riccardo Patrese was only sixth at the start of the race but retirements allowed him to finish second. Fittipaldi was even luckier for he was second last on the first lap, yet finished in third place.

1

1. The flag has just dropped. The leaders have already passed. Andretti climbs the rear end of Jarier's Tyrrell...

2

2. ...and then falls back on the track, forcing Mass to swerve...

3

3. ...into poor Zunino who then hits the wall. The Argentine doesn't restart.

4

4. Second lap and there's a clear pattern to the race : Piquet, Depailler, Arnoux, Jones and Giacomelli.

5

5. At the hairpin, Arnoux tries to pass Depailler but fails.

6

6. A few seconds later, and slightly further back in the field, Jarier tries the same manœuvre on Scheckter, but also in vain.

7

7. They've just started their fourth lap. Jones has taken Arnoux. Reutemann isn't far away, but not for long.

GOODYEAR took the décision a couple of, months ago not to supply qualifying tyres any more, yet the temptation for them to take them to Long Beach was too much. The super sticky tyres are to be banned as from the Belgian (and next) Grand Prix, so they might just as well use up existing stocks. But furthermore, Goodyear wanted to make sure that they weren't going to suffer a third consecutive defeat by Michelin, especially here on their home ground. There was little chance of the latter for the two teams using the French tyres had little hope anyway. Ferrari are going through a bad period currently, and Renault would be at a disadvantage because of their turbo engine which doesn't pick up quickly enough on twisty tracks.

It was therefore not suprising, in the circumstances, to find three Goodyear-shod cars in the first three places after the first timed session : Pironi in front of Jones and Piquet. Ligier, Williams and Brabham were fighting it out on equal ground. The Renaults were fourth and sixth, proving that they'd made up for their peaky turbo engine in other ways.

The order after the first session is roughly what one would expect following previous races. But the whole thing changed the next day and gave rise to the hopes of some teams who had scarcely figured during previous races this year. It wasn't really surprising to find Nelson Piquet on pole position, but his margin of nearly a second was certainly extraordinary. Beside him sat Arnoux in the Renault, and that was certainly unexpected. But in fact, Arnoux, like Piquet, had taken advantage of the first few minutes of practice when the track was at its fastest, after which it deteriorated badly and inexplicably.

A tremendous start and Piquet has a winning chance.

The second row of the grid held even more surprises for it comprised Depailler's Alfa Romeo and Lammers's ATS. And who would have guessed that ? The Williams, and even more so the Ligiers were unable to take full advantage of their qualifying tyres nor to make use of the first few minutes of practice. So they'd mortgaged some of their chances even before the start, for its very difficult to overtake at Long Beach.

The start is more important than usual at Long Beach, for it can dictate the pattern of the race. There were two alternatives. The first was that Arnoux would be quickest off the line, and then he would stay in the lead for a long time for passing is hard apart from at the end of the straight. But the Renault would be quick on the straight thanks to the turbo engine, so that it could pull out a little gap, which it would lose during the twisty section of the track. On the other hand, Piquet could be quicker off the line and that would give him a good chance of winning. Behind him, the Renault and Alfa Romeos, heavier because of their increased fuel loads, would slow down the rest, in particular the Williams. They had the greatest chance of worrying the Brabham during the opening laps, even though Jones was having to use his spare car after his race car's engine blew up during the warm-up.

Of the two alternatives, it was the second that became fact, Piquet taking off the quicker in front of Depailler and Arnoux. It was the beginning of a superb one man show. The second Brabham driver, Zunino, was soon out after crashing at the hairpin at the end of the straight. Another early accident claimed Andretti, and Mass had to pit early on. Passing the pits for the first time, Lammers felt his transmission break, and his hopes were dashed.

8 →

9 →

8. The debris of the fourth lap accident : Jarier's three-wheeled Tyrrell, and De Angelis's Lotus with frontal damage.

9. Regazzoni is one of the beneficiaries of the retirement rate. He's gained six places and is in front of Watson.

10 →

11 →

10. Frustrated in his efforts to get by Depailler, Jones tries to go round the outside... and half spins.

11. Fittipaldi starts to gain places. He takes 11th place from teammate Rosberg on the 15th lap.

12 →

13 →

12. Depailler spins on the 18th lap and has to let Villeneuve past.

13. It's all over for Jones who collides with Giacomelli on the 48th lap.

14 →

15 →

14. Regazzoni lost his brakes at the end of the straight on the 51st lap. Zunino's Brabham helped to slow the Swiss driver's car before it hit the wall.

15. Viva Brazil ! Their national anthem rings out to the joy of South Americans. Nelson and Emerson have a right to be delighted.

Slow and continuous retirement rate.

Piquet quickly established his lead immediately pulling out a few lengths over Depailler and Arnoux who were followed by Jones. The latter's Williams took the Renault during the third lap, but there was another mix-up on the fourth lap. This involved Reutemann and Giacomelli at first, fifth and sixth respectively. It was at the hairpin before the straight. The track was blocked. Jarier was delayed, tried to force a way through and lost a wheel in the process. Further back, De Anglais couldn't help hitting Cheever and suffered a twisted ankle in the following accident.

There were only 18 runners, out of the original 24 by the fifth Lap, and of those 18, two had already stopped in the pits. Piquet led Depailler, Jones and Arnoux. Further back came Villeneuve who had just passed Patrese. Daly was seventh in front of Pironi, Laffite (from 16th place), and Jabouille, all close together. Then came the final bunch comprising Rosberg, Regazzoni, Fittipaldi. Scheckter had been held up by the accident when 11th but dropped to a lone 15th place in front of Giacomelli who had managed to restart unlike Reutemann. Both Mass and Cheever had pitted and they brought up the rear.

With Piquet already out on his own in front, interest reverted to the second place struggle between Depailler and Jones. The Williams number one caught the Alfa after eight laps having overtaken Arnoux. Jones tried hard to find a way by the Alfa but in vain. Depailler no doubt remembered the lesson that Lauda had given him at Monaco last year. He defended his position with alacrity, sometimes a little over enthusiastic, to such an extent that Jones nearly crashed during one desperate effort. He recovered though and caught the Alfa Romeo again within three laps and finally got passed on the 18th lap.

Could Jones catch Piquet who was a dozen seconds ahead of him ? One hoped so for the race's sake. There was some hope, for the gap had been cut to 10''8 on the 20th lap, but then it returned to 12'' and stayed there.

Further back, René Arnoux began to have trouble with fading brakes and was caught and overtaken by Villeneuve (14th lap) and Patrese (25th lap). That was the first six. They were followed at a distance by Laffite, Pironi, Regazzoni, Fittipaldi, Rosberg, Giacomelli, Watson and Daly who had lost places after losing his brakes when seventh. Scheckter, Mass and Jabouille followed, the latter also suffering brake trouble.

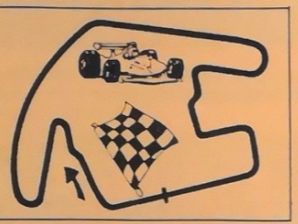
From then on, the race simply became an elimination event. Jones lost second place on the 48th lap and Patrese inherited it for Villeneuve had changed tyres and then his transmission had broken, and Depailler had spun and his suspension had broken. Consequently, Arnoux found himself in third place, but then lost it on the 62cnd lap when a tyre burst. Laffite retired for the same reason while Pironi began to climb back through the field having changed his tyres. These ups and downs meant that Regazzoni, Fittipaldi and Watson all began to make up places until Clay crashed on the 51st lap.

When Arnoux pitted, Fittipaldi took over third place in front of Watson who was harried by Scheckter during the closing stages. Watson held on to his fourth place behind Piquet, Patrese and Fittipaldi. Pironi took the final point following a fine drive at the end of the race, although his Ligier had never really pulled away from Mass's Arrows. Daly and the two Renaults were the only other finishers. □

Long-Beach statistics

UNITED STATES GRAND PRIX WEST
Date : March 30, 1980
Circuit length : 2.02 miles
Race distance : 80 laps, 162.788 miles
Conditions : Hot and sunny
Attendance : 70.000 spectators

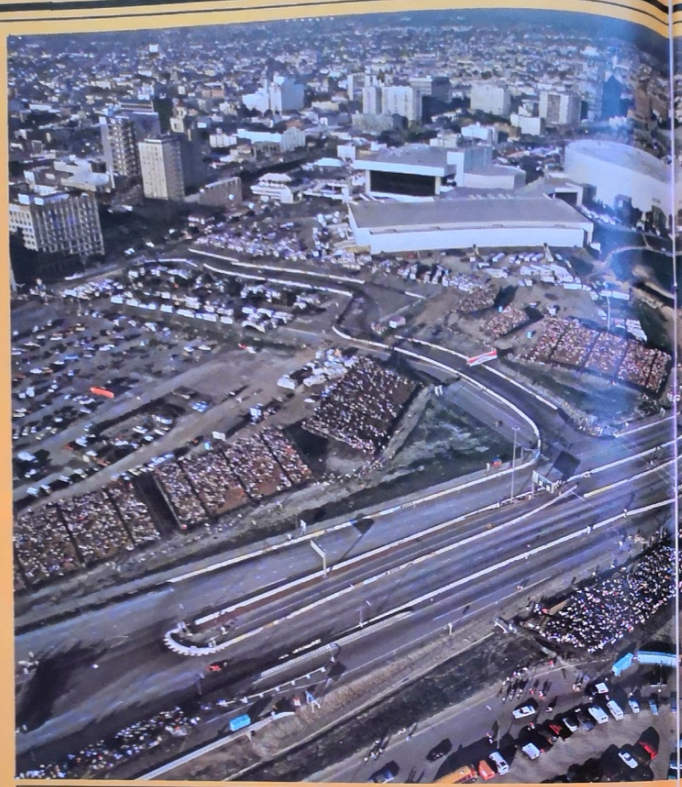
THE RECORD
(last four races)
1976 : Clay Regazzoni (Ferrari 312 /T/76)
1977 : Mario Andretti (Lotus 78)
1978 : Carlos Reutemann (Ferrari 312 T3)
1979 : Gilles Villeneuve (Ferrari 312 T4)



STARTING GRID

PIQUET Brabham BT 49 1'17"694	**ARNOUX** Renault RE24 1'18"689
DEPAILLER Alfa Romeo 179 1'18"719	**LAMMERS** ATS D4 1'18"783
JONES Williams FW 07 1'18"819	**GIACOMELLI** Alfa Romeo 179 1'18"924
REUTEMANN Williams FW 07 1'18"964	**PATRESE** Arrows A3 1'19"071
PIRONI Ligier JS 11/15 1'19"276	**VILLENEUVE** Ferrari 312T5 1'19"285
JABOUILLE Renault RE 23 1'19"316	**JARIER** Tyrrell 010 1'19"318
LAFFITE Ligier JS 11/15 1'19"455	**DALY** Tyrrell 010 1'19"744
ANDRETTI Lotus 81 1'19"763	**SCHECKTER** Ferrari 312 T5 1'20"151
MASS Arrows A3 1'20"410	**ZUNINO** Brabham BT 49 1'20"491
CHEEVER Osella FA1 1'20"808	**DE ANGELIS** Lotus 81 1'20"830
WATSON McLaren M 29C 1'20"868	**ROSBERG** Fittipaldi F7 1'20"911
REGAZZONI Ensign MN 180 1'20"984	**FITTIPALDI** Fittipaldi F7 1'21"350

Non-Qualified :
KENNEDY (Shadow DN11) 1'21"523
LEES (Shadow DN11) 1'23"486
SOUTH (Mc Laren M 29 C) 1'24"121



TIMES IN UNOFFICIAL PRACTICE

	Friday morning	Saturday morning	Sunday morning
PIQUET	1'20"87	1'19"97	1'20"36
ARNOUX	1'21"64	1'20"07	1'21"17
DEPAILLER	1'22"00	1'20"36	1'20"19
LAMMERS	1'21"99	1'20"58	1'21"74
JONES	1'20"54	1'21"33	1'20"90
GIACOMELLI	1'21"52	1'19"97	1'20"79
REUTEMANN	1'20"90	1'21"20	1'20"90
PATRESE	1'22"34	1'19"62	1'20"45
PIRONI	1'20"21	1'21"09	1'21"16
VILLENEUVE	1'20"95	1'20"47	1'20"18
JABOUILLE	1'20"66	1'19"58	1'21"36
JARIER	1'21"49	1'20"69	1'21"92
LAFFITE	1'20"99	1'20"03	1'21"03
DALY	1'22"29	1'22"12	1'22"51
ANDRETTI	1'21"67	1'21"05	1'22"38
SCHECKTER	1'21"68	1'20"63	1'20"46
MASS	—	1'21"09	1'23"14
ZUNINO	1'21"95	1'21"70	1'21"96
CHEEVER	—	—	—
DE ANGELIS	1'20"53	1'20"99	1'21"56
WATSON	1'23"10	1'20"51	1'21"68
ROSBERG	—	1'22"44	—
REGAZZONI	1'22"84	1'21"49	1'24"38
FITTIPALDI	1'22"83	1'21"35	1'22"89
KENNEDY	1'23"73	1'22"27	—
LEES	—	—	—
SOUTH	—	—	—

OFFICIAL PRACTICAL TIMES

	1st session	2cnd session
PIQUET	1'19"805	1'17"694
ARNOUX	1'19"862	1'18"689
DEPAILLER	1'20"564	1'18"719
LAMMERS	1'20"234	1'18"783
JONES	1'19"440	1'18"819
GIACOMELLI	1'20"606	1'18"924
REUTEMANN	1'19"907	1'18"964
PATRESE	1'20"824	1'19"071
PIRONI	1'19"305	1'19"276
VILLENEUVE	1'20"182	1'19"285
JABOUILLE	1'20"147	1'19"316
JARIER	1'20"815	1'19"318
LAFFITE	1'20"406	1'19"455
DALY	1'20"935	1'19"744
ANDRETTI	1'21"197	1'19"763
SCHECKTER	1'20"382	1'20"151
MASS	1'21"665	1'20"410
ZUNINO	1'20"419	1'20"419
CHEEVER	1'22"645	1'20"808
DE ANGELIS	1'20"830	1'20"830
WATSON	1'22"18	1'20"868
ROSBERG	1'22"498	1'20"911
REGAZZONI	1'21"477	1'20"984
FITTIPALDI	1'22"288	1'21"350
KENNEDY	1'23"781	1'21"523
LEES	1'23"486	1'23"486
SOUTH	1'25"820	1'24"121

THEIR FASTEST RACE LAPS

Piquet	1'19"83
Patrese	1'21"35
Fittipaldi	1'21"51
Watson	1'21"65
Scheckter	1'21"48
Pironi	1'20"61
Mass	1'20"71
Daly	1'21"91
Arnoux	1'21"28
Jabouille	1'20"48
Rosberg	1'22"19
Regazzoni	1'21"91
Giacomelli	1'20"79
Jones	1'20"67
Villeneuve	1'20"47
Depailler	1'20"76
Laffite	1'21"18
Cheever	1'22"41
Reutemann	1'21"92
Jarier	1'23"58
De Angelis	1'24"13
Andretti	—
Zunino	—
Lammers	—

PIT STOPS AND RETIREMENTS

Lammers : retired 1st lap, broken transmission
Mass : puncture 1st lap.
Zunino : crashed 1st lap.
Andretti : crashed 1st lap.
Reutemann : retired 3rd lap, broken transmission.
Jarier : crashed 3rd lap.
De Angelis : crashed 3rd lap.
Cheever : crashed 3rd lap, retired broken transmission 11th lap.
Jabouille : brakes bled on 9th, 22cnd, 39th and 50th laps.
Pironi : puncture 27th lap.
Depailler : spun 28th lap, retired 40th lap, broken front suspension.
Laffite : burst tyre 36th lap.
Villeneuve : changed tyres 41st lap, retired 46th lap, broken transmission
Jones : retired 47th lap, collision with Giacomelli
Giacomelli : collision with Jones 47th, lap, subsequent retirement on 49th lap.
Regazzoni : crashed 50th lap.
Rosberg : retired 59th lap, overheating
Arnoux : type burst 63rd lap.

PROVISIONAL WORLD CHAMPIONSHIP CLASSIFICATION
(After the Argentine, Brazilian, South African and US GP West GPs)
1. Arnoux and Piquet 18 pts - **3.** Jones 13 pts - **4.** Pironi 8 pts - **5.** Patrese 7 pts - **6.** De Angelis and laffite 6 pts - **8.** Rosberg and Fittipaldi 4 pts - **10.** Daly, Prost and Watson 3 pts - **13.** Reutemann, Giacomelli and Scheckter 2 pts - **16.** Mass 1 pt.

CONSTRUCTORS CUP

1. Renault and Brabham 18 pts - **3.** Williams 15 pts - **4.** Ligier 14pts - **5.** Arrows and Fittipaldi 8 pts - **7.** Lotus and McLaren 6 pts - **9.** Tyrrell 3 pts - **10.** Alfa Romeo and Ferrari 2 pts.

RESULTS

1. PIQUET	Brabham BT 49	80 laps in 1h 50"18"55 (92.904 mph)
2. PATRESE	Arrows A 3	49"28 behind
3. FITTIPALDI	Fittipaldi F 7	1'10" behind
4. WATSON	Mc Laren M29C	one lap behind
5. SCHECKTER	Ferrari 312 T5	one lap behind
6. PIRONI	Ligier JS 11/15	one lap behind
7. MASS	Arrows A3	one lap behind
8. DALY	Tyrrell 010	one lap behind
9. ARNOUX	Renault RE 24	two laps behind
10. JABOUILLE	Renault RE 23	nine laps behinc

Fastet laps : Piquet, 1'19"83, 95.654 mph **(Record).**

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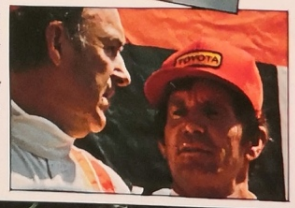
Postcard from Long-Beach

A forest of motor homes under the Californian palm trees.

The pomp of a Grand Prix.

Patrick Segal, author of « L'Homme qui Marchait dans sa Tête » visits his first Grand Prix.

One way of promoting cigarettes, or at least, the cars carrying their colours.



Gene Hackmann and Parnelli Jones, when Hollywood comes to Long Beach.

Phil Hill, Jack Brabham, Rene Dreyfuss, Dan Gurney, drivers from another era.

LONG BEACH IN PICTURES

1. Californian setting for the Tyrrells.

2. A lucky yet deserved second place for Riccardo Patrese who may now be seeing the light at the end of the tunnel.

3. René Arnoux qualified on the front row and just missed taking third place.

4. Depailler is shown hard at work on the way down from Linden Avenue. The Alfa Romeos are now competitive.

5. An unexpected place on the rostrum for Emerson Fittipaldi. It's unlikely that the F7 will appear in Grand Prix racing again.

6. Ligier were the greatest disappointment of the Grand Prix. Pironi set the quickest time on the Friday but could only finish a distant sixth.

7. Long Beach lap by lap.

8. Piquet was the quickest off the line, leaving Arnoux behind. Eighty laps of racing ahead and a long list of retirements.

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PROFORMAX
RENAULT
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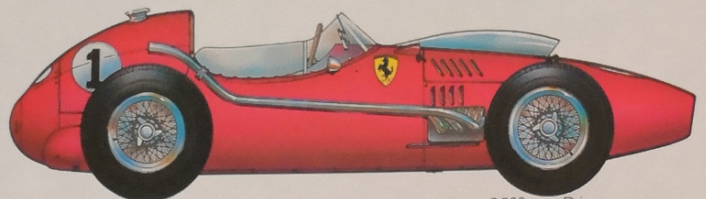
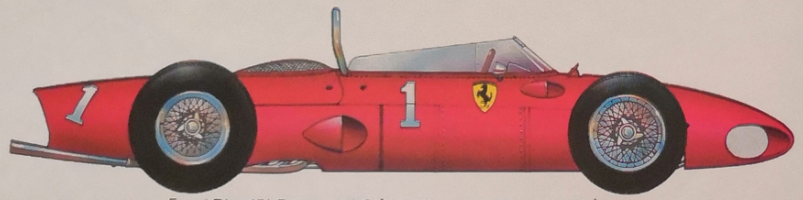
RENAULT

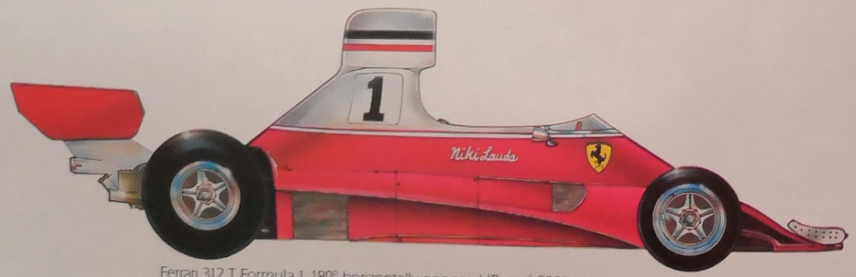
Race Winners



Ferrari Dino 246 Formula 1. 65° 2417 cc V6 engine. 285 bhp at 8,500 rpm. Driver: Mike Hawthorn – World Champion 1958.



Ferrari Dino 156 Formula 1. 65° 1½ litre V6 engine. 175 bhp at 9,000 rpm. Driver: Phil Hill – World Champion 1961.



Ferrari 312 T Formula 1. 180° horizontally opposed (Boxer) 2991 cc engine. 500 bhp at 12,200 rpm. Driver: Niki Lauda – World Champion 1975.

Ferrari 312 T4 Formula 1. World Constructors Champion 1979. Driven by Jody Scheckter and Gilles Villeneuve who finished 1st and 2nd overall in the Drivers Championship.

Formula 1 World Champions

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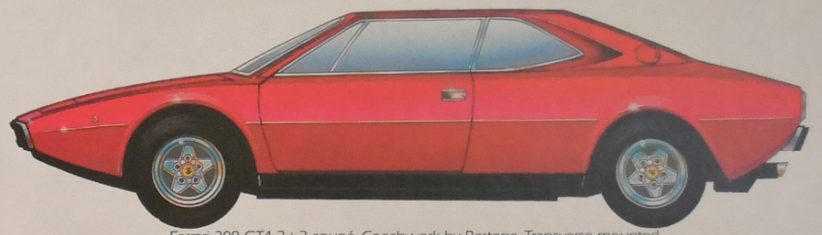
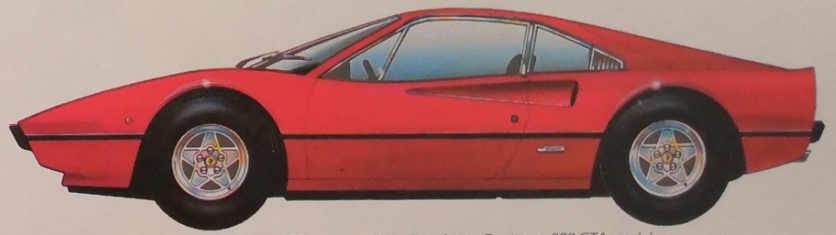
Road Winners



Ferrari 308 GT4 2+2 coupé. Coachwork by Bertone. Transverse mounted 90° 2926 cc four overhead camshaft V8 engine producing 255 bhp at 7,600 rpm.



Ferrari 308 GTB/GTS. Coachwork by Pininfarina. Engine as 308 GT4 model. 308 GTS model also available with removable roof.

Ferrari 400i automatic. Coachwork by Pininfarina. 4823 cc four overhead camshaft V12 engine, fitted with Bosch fuel injection. Also available with 5 speed all synchromesh manual transmission.

Ferrari BB 512. Coachwork by Pininfarina. Horizontally opposed 12 cylinder four camshaft 4942 cc engine producing 360 bhp at 6,800 rpm. Electronic ignition. Dry sump lubrication.

1975, 1976, 1977 and 1979.

Ferrari

Ferrari

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SCAINI
22
Marlboro
Agip
GOODYEAR

SKOL
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CHAMPION
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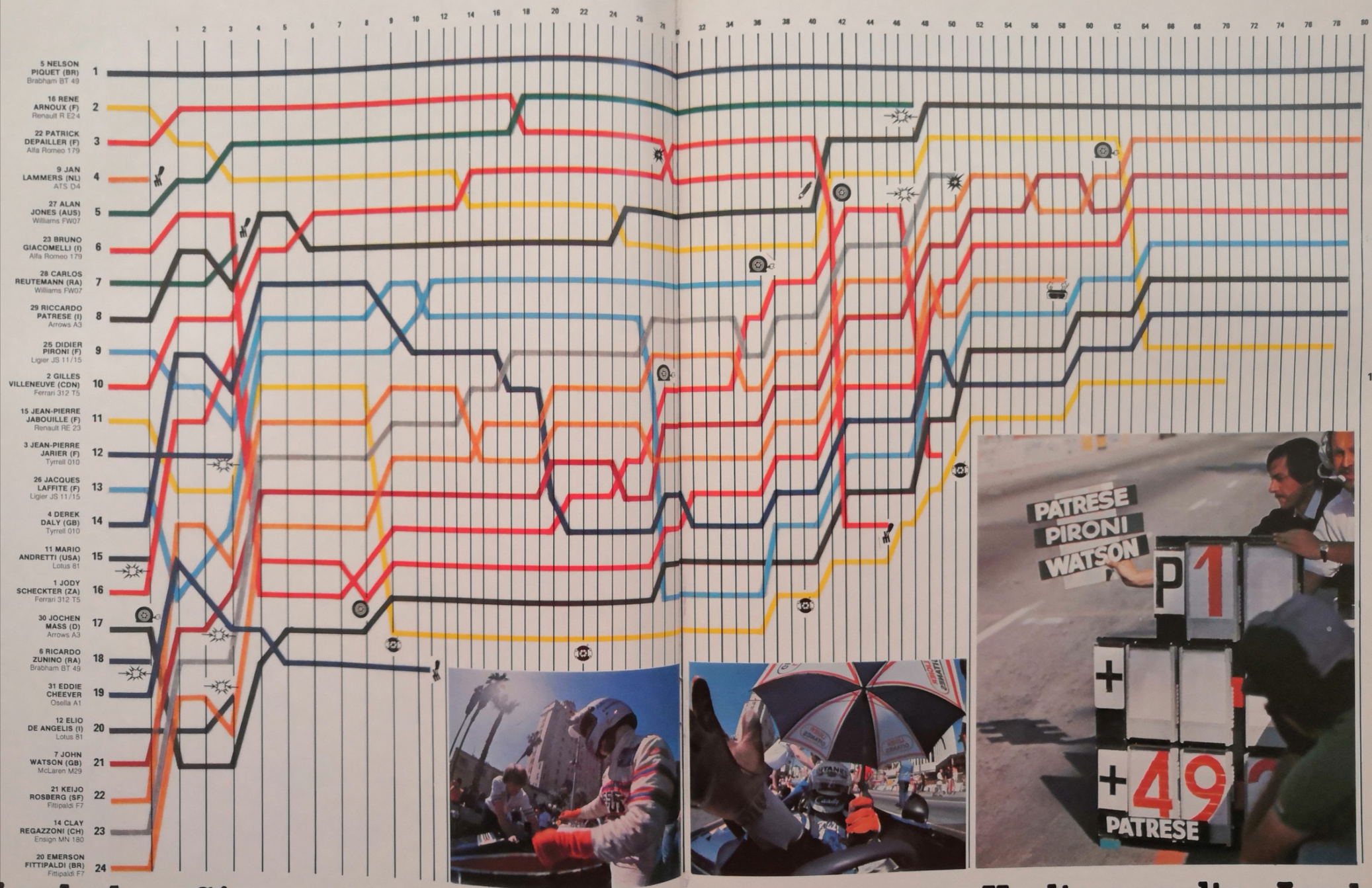
Lap by lap - Giro per giro - Runde um Runde - Tour par tour - Vuelta a vuelta - Lap by


1 NELSON PIQUET (BR) Brabham BT 49
2 RENE ARNOUX (F) Renault R E24
3 PATRICK DEPAILLER (F) Alfa Romeo 179
4 JAN LAMMERS (NL) ATS D4
5 ALAN JONES (AUS) Williams FW07
6 BRUNO GIACOMELLI (I) Alfa Romeo 179
7 CARLOS REUTEMANN (RA) Williams FW07
8 RICCARDO PATRESE (I) Arrows A3
9 DIDIER PIRONI (F) Ligier JS 11/15
10 GILLES VILLENEUVE (CDN) Ferrari 312 T5
11 JEAN-PIERRE JABOUILLE (F) Renault RE 23
12 JEAN-PIERRE JARIER (F) Tyrrell 010
13 JACQUES LAFFITE (F) Ligier JS 11/15
14 DEREK DALY (GB) Tyrrell 010
15 MARIO ANDRETTI (USA) Lotus 81
16 JODY SCHECKTER (ZA) Ferrari 312 T5
17 JOCHEN MASS (D) Arrows A3
18 RICARDO ZUNINO (RA) Brabham BT 49
19 EDDIE CHEEVER Osella A1
20 ELIO DE ANGELIS (I) Lotus 81
21 JOHN WATSON (GB) McLaren M29
22 KEIJO ROSBERG (SF) Fittipaldi F7
23 CLAY REGAZZONI (CH) Ensign MN 180
24 EMERSON FITTIPALDI (BR) Fittipaldi F7

Lap by lap - Giro per giro - Runde um Runde - Tour par tour - Vuelta a vuelta - Lap by

Postcard from Long-Beach

The traditionnel picture of Long Beach with the Queen Mary and the coastline of California.

Superb aerobatics on the morning of the Grand Prix, manœuvres of which the drivers could become jealous.

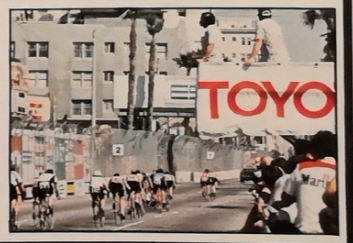
Flora and fauna.

Retiring from motor racing can be dangerous : James Hunt went skiing and ended up in a wheelchair.

The old cars do a few laps as usual, but they keep away from the concrete walls, for spare parts are rare.

The public demand a performance from their star of the moment. See page 60 for her response to their demands !

Now this sport could bring Jacky Ickx back to the tracks.



LONG BEACH EXTRA

DEPAILLER THE PROPHET

YOU'LL see, I'll be on the second row of the grid, » said Patrick Depailler on the eve of first practice. There it was, the Frenchman wasn't simply saying it, he meant it. But he's a natural optimist, he's known for his embellishment of reality. But not this time it seems. He backed up this prediction with an excellent test session that the team had at Nogaro, two weeks before the Californian race.

« *The car has improved a lot,* » explained Patrick with satisfaction. « *They haven't been able to do everything that I asked them to do after the South African Grand Prix because they ran out of time, but they've managed to do three-quarters of the things that I asked of them and that's already very good. When I first drove the Alfa, I thought it would soon be a museum piece. I never realised its enormous potential. And we've still more work to do.* »

No doubt about it, the man was confident.

So, the second row ? That was some prophecy. On the Friday, he hadn't been able to use his race car as expected. But everything was in order on the Saturday and at the end of the first timed session, there was the big surprise. Patrick was third quickest, just a tenth of a second from the front row. Teammate Giacomelli was sixth fastest. The Alfa Romeos were competitive. « *I told you so,* » said a delighted Depailler.

It was certainly a remarkable performance from the cars which are still heavy and bulky. « *Weight is still our biggest handicap,* » admitted Depailler. But this disadvantage, it seems, has been largely compensated for by progress with the road holding of the Alfa 179. Besides, the torque and power of the Italian V12 engine is also an advantage. Both drivers said they were happy with the straight line speed of their cars.

« *The big question marks hangs over our reliability,* » explained Depailler the evening after this memorable qualifying feat. « *I still haven't finished a race without encountering some sort of problem. So I really don't know what's going to happen.* »

Alfa's aggressive team manager, Carlo Chiti, delighted with this practice result especially considering his president Ettore Massacesi was present, said that the team had no particular tactics for the race. « *It's much better for us to look at the places at the front of the field than winning one or two points in the World Championship.* »

Giacomelli had a fairly lively race right from the start, but Depailler's was tremendous, even though it was tainted with certain excesses. Patrick was second at the start of the race and defended that position for all he was worth when Jones caught him up. It is perhaps one of Patrick shortcomings, this unrestrained determination in all things, but it is the same determination that stopped him from allowing the Williams past that brought him to back to motor racing after his accident, and for the latter, he gained the admiration of many.

All the same, Jones succeeded. Patrick still remained a solid third but then his Alfa's handling began to change. Furthermore, the exhaust note took on a new tone for the exhaust had broken. The clutch was also showing signs of weakness and that caused Patrick to make a mistake on 29th lap. « *I had trouble changing down,* » explained Patrick. « *Then suddenly the rear wheels locked up and spun at the hairpin at the end of the straight.* » Villeneuve took third place off him, but the Alfa wasn't going much further anyway. The car retired on the 41st lap with broken suspension. Whatever, the car had shown that a tremendous amount of progress had been made.

Let's hope the Italian team continue to make this progress and will soon be consistently competitive with the same material.

FITTIPALDI CAREER, PART TWO ?

EMERSON Fittipaldi hadn't been on the rostrum since the Brazilian Grand Prix in 1978 where he finished in second place. Consequently, one could understand how he felt at the end of the Grand Prix at Long Beach for the winner was Brazilian, like him, and that was enough to awaken patriotic feeling.

Fittipaldi and Piquet obviously share the same National anthem, but there is not surprisingly another interesting link. They are of two different generations, one is the old stager, the former champion, and the other is the bright young hope, perhaps the future champion.

Peter Warr, the new team-manager for the Fittipaldi team since the disbanding of Wolf, showed his enthusiasm after the race, pressing his driver and team patron with questions and compliments. « *You know that John Watson is your best friend ?* » he told him. « *Scheckter was catching you fast and it was John who held him up.* »

« *I thought so,* » smiled Emerson. « *I saw the pit signal saying that the gap was diminishing. Then I saw for a few laps that it was + 12", + 12", and I realised that my third place was safe.* »

« *And you didn't hit anyone during the first few laps ? What happened ?* » asked Warr.

This time, Emerson burst out laughing. « *It was amazing. On the fourth lap, yes, I think it was the fourth lap, I arrived and the track was completely blocked. I stopped, I was blocked in, completely at a standstill. I looked to the right, to the left, I couldn't see how I could get round them. Then I saw a gap and off I went again.* »

« *And the brakes ? Were the brakes OK ?* ».

« *Fine, no problem.* »

Buoyed by his good result, by the bustle around him which had seemed to have avoided him for a while, by the people once again crowding around him, Emerson still wasn't taken in. He knew that he had mainly benefited from the circumstances.

« *I knew that Long Beach is very testing. I hoped that I could finish in the first six if I stayed out of trouble,* » he told us. « *But I didn't think within the first three. My car went well and I had a lot of luck. I missed all the accidents. But the F7 didn't really possess the potential for such a good result. Although I managed to set it up well on full tanks, it still lacked grip under braking and in the corners. I hope that I've driven this car in a race for the last time. Everyone in the team is now doing all they can to get the new car ready for Zolder.* »

One can imagine that Emerson will have no regrets in leaving behind the scarcely competitive F7. It's third place was certainly a superb leaving present, and perhaps bodes well for future results and a second career at the front for Emerson.

« *I hope so,* » added the Brazilian. « *I hope so.* »

RENAULT'S FALSE HOPES

A turbocharged engine has two qualities : power and power at low revs, but one characteristic handicap : turbo lag. It's obvious that the cars therefore work better over fast circuits with constant radius corners than on circuits which are twisty with slow corners and lots of gearchanges.

Consequently, few people reckoned that Renault would have much of a hope at Long Beach. The long straight was their only respite, and even that was preceded by the tightest hairpin on the circuit. The yellow cars had a lot of trouble out of that hairpin on the first day of practice. *« It's incredible, »* exclaimed one of the French engineers, *« we're worse off this year than last, when we were using the old single turbo car. We've taken times in the hairpin and we've actually lost half a second there. That's an awful lot. »*

All the same, the Renaults were fourth and sixth after the first practice session which wasn't a bad effort considering the unsuitable circuit.

The gear ratios were changed on both cars and drivers Arnoux and Jabouille found things a little easier at the hairpin the next day. In fact Arnoux managed to put his car on the front row of the grid. The Renault people began to pay for a small miracle.

It didn't happen.

They were false hopes. Right from the opening laps of the Grand Prix, Arnoux was incapable of keeping up with the leaders. His car was heavier than his rivals' because of the extra petrol needed by the thirsty turbocharged engine and this held him up both under braking and acceleration. He managed to get into third place. Four points would be very useful in the World Championship race, but they disappeared with the scraps of rubber that came off his tyre when it punctured.

LIGIER'S WRONG TURN

THEY were the closest to the inaccessible Williams in Argentina. In Brazil and South Africa, they were the Renaults' main rivals. With the latter handicapped by the twisty Long Beach circuit, surely the Ligiers were favourites in California. The French team seemed to have learnt the importance of certain ground effect factors which escaped them last year. The JS 11/15s not only held the ground well, but also had good straight line speed, the one normally at the expense of the other.

« All the extra tension we've had within the team has gone », confirmed Jacques Laffite. *« We know how to get the best from our cars. We've now got a research and development team. We are now capable of winning the World Championship ».* There certainly seems to be a breath of confidence within the French team, replacing the nervous tension of last year.

There were many reasons why the French team was the one to beat.

But while the predominant colour was blue for Ligier, it was not the same for Long Beach as a whole. Didier Pironi confirmed that the team had a good chance by setting the quickest time in the first qualifying session. The next day, during the final session that would be vital to the grid formation, the Ligier team had a big surprise. Pironi was only ninth fastest and Laffite 13th.

Gerard Ducarouge, the team manager, didn't believe it. *« It's incredible. Apart from strengthening the transmission, we haven't touched the cars since yesterday. They're the same. They were perfectly balanced yesterday, but today they lack grip. Jacques and Didier aren't going any quicker on qualifying tyres than they are on race tyres. »*

The Ligier team had indirectly become victims of the preferential treatment awarded them by Goodyear in the position as top team. They had special qualifying tyres which were lighter and more sophisticated. *« It's going to be good »,* promised Leo Mehl. It wasn't at all good.

During the race, the Ligiers never really showed well. *« It's impossible to say what would have happened if we'd been better placed on the grid »,* said Ducarouge. *« We might have been able to challenge Piquet, or at least fight for second place. When the cars are lost in the middle of the field, it's impossible to draw any conclusions because the race is affected by other elements which are not apparent when one is at the front. »*

But the team had some small consolation. Pironi won a point, in spite of a puncture.

PATRESE : LUCK DOESN'T EXLAIN EVERYTHING

RICCARDO Patrese's second place at Long Beach may have been lucky but it wasn't undeserved. Certainly, Riccardo gained many places thanks to the incidents and retirements in front of him. He was seventh on the third lap, and then gained only one place by passing someone, Arnoux on the 25th lap. The rest of his places were picked up by simply waiting patiently for the people in front to drop out.

On the fourth lap, Reutemann and Giacomelli collided in front of the Arrows. Two places had been won in a single stroke. By the end, Jones, Villeneuve and Depailler had also disappeared.

« I was astounded, » said the Arrows driver after the race. *« I just kept going without seeing anyone nor overtaking another car apart from backmarkers. And when I passed my pit, I read my pit signals saying P5, then P4, then P3 and finally P2, showing my progress up the leaderboard. »* Perhaps fortunately for the sport, no P1 was shown to Riccardo. That would have been too unfair to Piquet.

Obviously circumstances played a certain role in the fine position that Patrese took at the end, for his race wasn't particularly difficult as he confirmed afterwards. *« No problem, the car went well and I never really had to battle hard throughout the race. The first 20 laps were a little difficult, one reason being because of the car's handling on full tanks, the other because I knew that Arnoux was within reach and I tried hard to catch him and overtake him. »* Once Arnoux was behind him, Riccardo simply drove to finish. *« I was on my own, unable to catch the cars in front of me, and unworried by the cars behind me. »*

Having said that, luck doesn't explain everything, for this second place constitutes flattering proof of the progress made on the Arrows A3. No-one, especially the drivers, reckoned that they would be competitive at Long Beach. The car's main feature is its straight line speed, something that is certainly useful for the long straight at the Californian circuit, but scarcely a winning feature. Furthermore, suspension problems had revealed themselves in South Africa, and Mass was of the opinion that it wouldn't be before Zolder that Tony Southgate would be able to sort it out.

In fact they began to make up ground at Long Beach. Patrese set second fastest time on Saturday morning, qualified eighth quickest and was sixth on the first lap. Without being right at the front, Patrese was nevertheless one of the quickest. Consequently, if he was to finish the race, it would be only right that he finish well. But second place was scarcely the aim. Even so, after a long and depressing 1979 with uncompetitive cars, it's only right that the Arrows team should be encouraged and bolstered by a little success.

TECHNICAL

GEARBOXES FOR MODERN WING-CARS

When the Lotus 79 first appeared in November 1977, it constituted a completely new design of chassis and suspension. The generation of wing-cars that were born from the 79 meant that completely new aerodynamic criteria now existed for the design of these cars. And it was noticeable at Long Beach that these aerodynamic criteria now apply to gearboxes as well.

by Giorgio Piola.

SINCE the three litre Formula One first started, gearboxes have scarcely developed at all. Since 1974 the Ferrari team have used a transverse gearbox which adapts well to their flat 12 boxer engine. But the continual search into the use of the best ground effect has now pushed designers into working on this unit.

Lotus have considered the problem for quite a long time. The original 79, it will be remembered, was fitted with a Lotus-built gearbox in collaboration with Getrag, but it never really worked properly. After this lack of success, Lotus have often used a gearbox based on Hewland parts but with a casing cast by Lotus themselves. This was also done in order to save weight, for modern wing-cars use outboard brakes, so it was no longer necessary to have caliper mountings on the gearbox casing.

The gearbox that Lotus used until the South African Grand Prix was certainly narrower than the conventional Hewland box, but it wasn't stiff enough and had broken. Tyrrell also produced their own gearbox at Kyalami, the casing being a single piece of metal incorporating a spacer which contained the oil tank.

Colin Chapman has gone a lot further in his research. His latest gearbox was on show in Long Beach. Chapman has succeeded in integrating the shock absorbers in the design of the gearbox. They are fitted into a space specially set into the casing which also allows a weight gain as it does away with the little tubular framework which carried the shock absorbers previously.

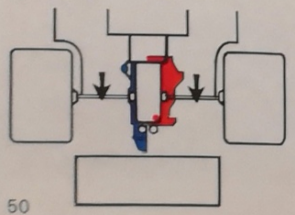
But the most important point about this new gearbox is its shape. It's already narrower than the conventional Hewland but it narrows even further at the bottom end. This is very important, for is well known that what is important on current wing cars is that the air is allowed to escape easily from the side pods. Consequently the space between the rear wheels and the gearbox is very important. The new Lotus gearbox leaves a large and uncluttered area free for this purpose.

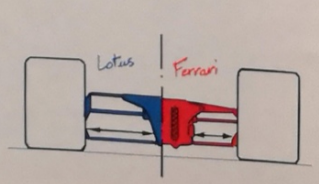
The Brabham team have their own theory about this, although the end result is intended to be the same. They've built their own gearbox, totally independent of Hewland. It has been designed exclusively for MRD by Peter Weismann of California. It's a transverse system but very short, very high and narrow. It's actually heavier than the Hewland. Ratio changing is very easy due to an opening on the right hand side. It's not necessary to take off the suspension.

This gearbox has the same advantages as those of the Ferrari gearbox. That is to say that the weight is concentrated around the rear axle. But the Weismann gearbox is narrower by 20 cms than the Ferrari version. In fact it's the size of the Ferrari box that hinders their ground effect research. If what we have heard on numerous occasions is true, this 312 T gearbox will not drive the new Ferrari turbo. A new gearbox is being built.

The very short Weismann gearbox allows the shock absorbers to be fitted behind the gearbox, as on the Ferrari. This means even more space is procured to be used for ground effect.

When one looks at the Lotus and Brabham cars from the rear, one realises the aerodynamic advantages that these gearboxes procure. No doubt other gearboxes will now be developed within other teams searching for the same advantages. □





1 and 2 : narrow base for the new Lotus gearbox.

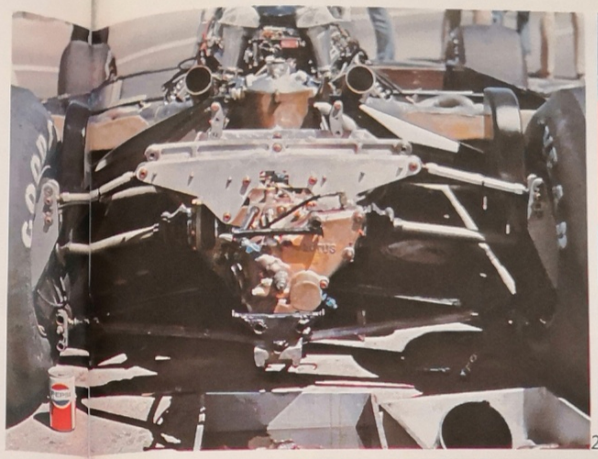
3 : Mounting holes are cast into the gearbox shape in order to accomodate the shock absorbers.

4 : The shock absorbers are cooled by an air scoop in the air box.

5 : The little Weismann gearbox as used by Brabham. It's short, high and narrow.

6 : It's easy to change the Weismann ratios and there's no need to touch the suspension thanks to the opening on the right.

7 : The shock absorbers are mounted behind the Weismann gearbox.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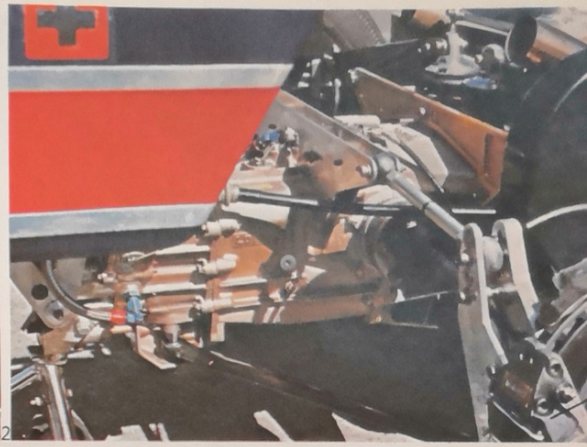
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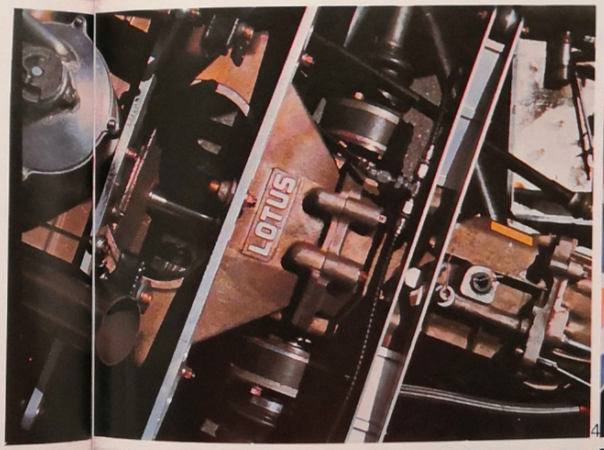

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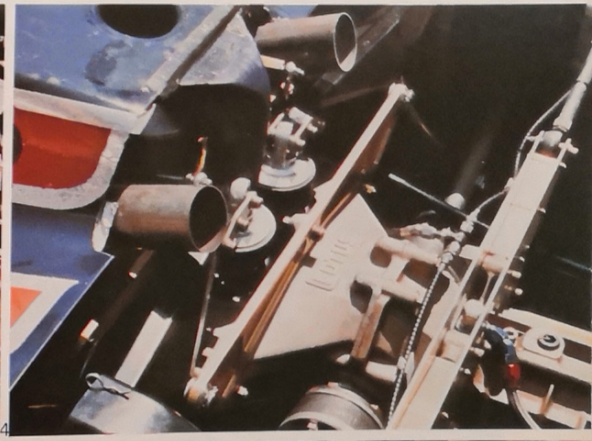
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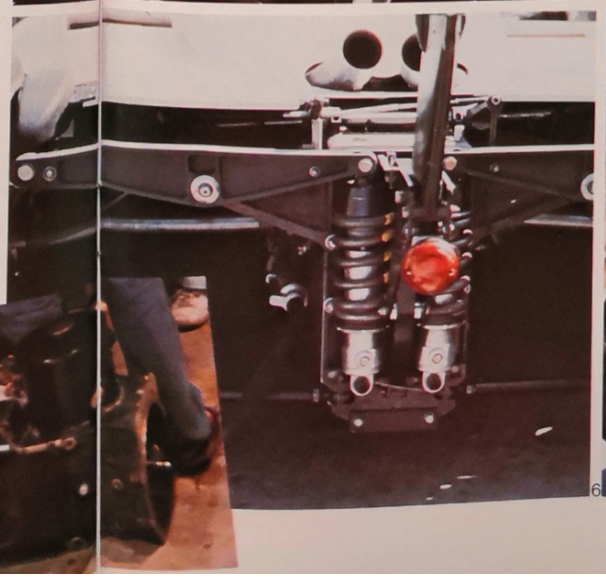
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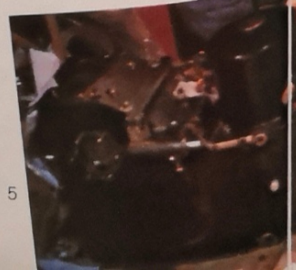
This drawing shows how little space the Weismann gearbox occupies in comparison to the normal Hewland gearbox and that of Ferrari.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JAN LAMMERS, HERO FOR A DAY

There may well have been some doubt about the talent of the young Dutchman Jan Lammers, but it must be dispelled. The ATS driver's performance during practice for the Grand Prix at Long Beach irrefutably proved that with a good car, Jan is as good as the rest of them. Jan showed that he has a good head on him as well as agility as he guided his car through the twists and turns of the Californian circuit. His position on the second row of the grid wasn't simply due to his new ATS D4, but also to his own talent.

by Eric BHAT.

Lammers has proved that he can put a competitive ATS well up on the grid.

Who has previously had the right to judge Jan Lammers ? Who can weigh up the chances of a second driver in an uncompetitive team without knowing what sort of conditions he's working in ? But many people had already forged their opinion of the young Dutchman it seems, and it was a negative opinion. Lammers never did anything with the Shadow DN 9, unlike De Angelis. When they both drove the Lotus at Circuit Paul Ricard last winter, De Angelis was quicker than Lammers. The latter was then marked as a driver without aggression who couldn't handle the power of Formule One and whose career in the top class of motor racing would be brief. The fact is that today Jan is only really a stand-in, about whom no-one is really worried, for a few weeks ago, he lost his drive. He couldn't find a sponsor for his ATS, so they thanked him and the German team went off to concentrate on one car.

Circumstances were such that Jan was at Kyalami when Marc Surer has his accident, and ATS team patron Gunther Schmidt called upon the Dutchman to try and qualify. He was also asked to drive in the US Grand Prix West and Belgium. « ***But I don't know what's going to happen after that,*** » Jan told us on arriving at Long Beach. « ***I have a contract for two races, no more.*** »

Jan certainly showed well during the first of those two races under the Californian sun. In fact he did better than that. He caused the sensation of the weekend. There was the fellow who hadn't qualified for the first three Grands Prix of the season mixing it with the World Championship leaders. The names of Lammers and ATS were more associated with the back of the grid or the reserve list, yet here they

→

were playing a starring role as never before. The establishment had been overthrown and everyone loved it. Such revolutions in motor racing are often well received because they make news and relief from the same old stories.
The facts were there in black and white. Session after session, Lammers set competitive times. He was eighth quickest after the first qualifying session, and next day he was fourth fastest. « *I savoured one particular moment during the first official session,* » Jan told us. « *I was stationary in the pits with an engine problem, but I was fourth fastest at the time. I knew that a number of cars might go quicker than I had done, but I knew that I could get on to the second row of the grid.* »
And life for Jan was made that much easier. Last year he was given only four sets of qualifying tyres, at Monaco, Dijon, Monza and Watkins Glen. At Long Beach, he was given the same number at the one race. « *They just came falling out of the sky,* » joked the Dutchman.

AND life was made that much easier for him in that he could concentrate on driving. « *The further up the grid one is, the fewer problems one has. A race winner doesn't necessarily have that much to talk about, while 14th man in the race has probably had all sorts of problems. When a driver is well down in practice, he has a head full of worries. Is it the car's fault, his mechanic's fault, or his own ? He asks himself all these questions, and it undermines his confidence.* »
But with his four sets of qualifying tyres, nothing was holding Jan and on Saturday afternoon, he set the fourth fastest time, missing the front row by just one tenth of a second.
The new ATS D4 is a much modified car and was certainly instrumental in Jan's performance. Jean-Pierre Jabouille, an expert in the technical side of things, took a look at the car on Thursday afternoon and had this to say about it : « *The new ATS should go well. It's very narrow and well thought out. Apart from one or two little details, it looks really good.* »
Practice was to prove the Renault driver right. « *We did a little testing at Willow Springs,* » said Jan. « *Although the engine quickly sprang an oil leak, I had time to notice that the car is very well balanced, it has a lot of downforce and good traction.* »
The car is one element, and the driver is another. Jan didn't qualify well at Long Beach by chance. Last year he set 14th fastest time in the heavy and rather slow Shadow. « *I love this circuit,* » he explained. « *It allows drivers to play a greater part in their performances than at most other circuits. One doesn't really talk about corners here, but more combinations of corners. One corner leads to another and then another, and it's hard to compromise in order to find the right line and go quickly through them all. If you go too fast through the first corner, you probably have to go slowly through the next, because you're off the right line. You have to find a balance. I find it very interesting, you never stop learning the circuit.* »

APART from the ATS's progress and the ease with which Lammers tackled these combinations of corners, there was a third element in the sudden competitivity of the German-Dutch partnership : the fact that the circuit was only open on Friday morning for the first time. « *We might not have been so well placed on a permanent circuit,* » said Jan, « *because the more powerful teams such as Williams can go and test for days and they would then be in front of us on the grid. Consequently, teams are a little more equal at circuits such as Long Beach and Monaco.* » Then with a malicious grin, he added. « *unless Essex manage to hire Monaco for a day.* »

Lammers didn't seem to be particularly excited, regarding events with a certain air of detachment.

Finally, determination has also had its effect. « *The team spirit has changed in two days,* » explained Lammers. « *Everyone is determined to win, trying hard to do that little bit more. One is tempted to cut short the job-list on a car that has qualified well down. During the two days of practice, the mechanics have really been on the look-out for the slightest little detail that requires attention.* »
The driver himself didn't appear particulary delighted by his qualifying result, regarding the whole thing in detached manner. « *I'm very satisfied,* » he admitted first of all, « *because fourth place in practice is hard to achieve, and more significant than fourth place in the race. But having said that, it's only qualifying on the second row, nothing more. I don't what the race is going to have in store for me tomorrow, but I'm already thinking of the next Grand Prix and how we can further improve the car. It's not a good thing to get worked up. A driver who gets overenthusiastic when things are going well can also become psyched out when he has problems. Throughout my year and a half Grand Prix career, I've tried hard not to get psyched out and to keep a cool head. That's why today I'm not very excited. Similarly, I didn't get over excited when I won the European Formula Three championship. I tried really hard to win and was really glad when I did, but I still had a headache when I was ill and aeroplanes still arrived late at airports...* »

JAN'S Formula One career had never been so promising, yet it was still precarious. Did he feel that he'd saved his career ? « *Not yet,* » he replied. « *No-one's rushing up with contracts in their hands. I think there's a little more to be done before that. But maybe those who doubted me will change their minds. I know that if I have a good car, I can be competitive. But I'm not about to take silly risks, not for 20th place or fourth,* »
So Lammers resolved to drive a sensible race. « *I'm not going to make a fool of myself. I'm going to do as well as I can, but not stupidly nor put the car at risk. If you drive in a measured manner, you can better exploit the car's qualities for the whole length of the race. Furthermore, you can analyse what's happening to it and gain information for the team which in turn improves the car for the next race.* »
Lammers sadly never had a chance to do much let alone to take any risks. To everyone's disappointment, he pulled off the circuit after a few hundred yards with broken transmission. « *One more lap during the warm-up and we'd have been abble to sort it out,* » sighed team manager Jo Ramirez. « *Oh well, now it's Belgium.* » □

Gute Häuser erkennt man nicht nur an der Speisenkarte.
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PARMALAT BRABHAM

Brabham-Ford BT 49/5 :
Nelson Piquet (BR)
Brabham-Ford BT 49/6 :
Ricardo Zunino (RA)
Brabham-Ford BT 49/3 :
Spare.

The B version of the Brabham BT 49 appeared for the first time at Long Beach and was basically used as a spare car. The whole rear end of the car has been considerably modified, principally because it uses a new transverse gearbox which necessitates a redesign of the suspension. The gearbox has been designed by Peter Weismann who is well known in CanAm and USAC racing and who worked with Ferrari. The box is very narrow and quite high, but also heavier than normal gearboxes. The new box has also altered the weight distribution which wasn't entirely satisfactory. The shock absorbers are mounted behind the gearbox as on the Ferrari. Otherwise, the three cars at Long Beach had only been slightly modified around the side pods and bodywork. The rear suspension of both race cars had been modified as well. For Long Beach, larger brake discs had been fitted as had big brake cooling ducts. The Long Beach circuit is very demanding on brakes, principally because of the long straight which is then followed by heavy braking for the hairpin. Then there is a twisty section of tight corners which again doesn't allow the brakes to cool. All the cars at Long Beach were fitted with bigger brakes and air scoops, like the Brabhams. We write this now without repeating it when detailing the cars of each team.
The Brabham BT 49B was only used during practice, on Friday by Piquet and on Saturday by Zunino. Apart from teething troubles, the new gearbox also caused difficulty in balancing the car. The new car still isn't ready for racing, even though it proved itself on a circuit that is traditionally hard on gearboxes. So Piquet and Zunino started in their own race cars. Zunino's performance didn't last very long, but Piquet's, of course, ended with Victory.)

WARSTEINER ARROWS

Arrows-Ford A3/02 :
Riccardo Patrese (I)
Arrows-Ford A3/04 :
Jochen Mass (D)
Arrows-Ford A3/01 :
Spare.

The narrow Arrows A3s arrived at Long Beach having been considerably altered and with a completely new set-up to that at Kyalami. Most noticeable was the new front suspension which altered the wheelbase because of a different angle of front suspension lever arms. The gearbox bodywork had also disappeared for on such a slow circuit it would present cooling problems.
During the first day of practice, both drivers said they were unhappy with their car's handling. They were sliding a lot and lacked grip. But after the afternoon's practice the next day, Patrese was smiling again.
« *The whole set-up was reviewed following my observations after practice. Now the car is going really well. It's very quick in a straight line. And the handling is like that of a new car.* »
In fact the Arrows team had gone back to old front suspension settings and were also using a new rear wing for the first time. Although the Arrows weren't as quick as the morning's practice might have led one to except, the work done at Long Beach was very useful in helping to understand the car's handling. There was another pleasing point : both cars finished with Patrese taking second place.

Arrows A3 : new rear wing and no enclosure of the gearbox.

SKOL FITTIPALDI

Fittipaldi-Ford F7/01 :
Emerson Fittipaldi (BR)
Fittipaldi-Ford F7/02 :
Keke Rosberg (SF)
Fittipaldi-Ford F7/03 :
Spare.

Apart from the brakes, the Fittipaldi F7s were unmodified, for the team are mainly working on the new car which should appear in eight weeks. During practice, the F7s had every possible problem : lack of grip, brake fading, gearbox problems. Nevertheless, Emerson managed to improve his car's handling on the Sunday morning. He started from the back row of the grip and drove consistently to third place. His teammate Keke Rosberg followed him for a while before a plastic bag caught in a radiator which caused the engine to overheat and Keke to retire.

LONG BEACH : A CIRCUIT HARD ON BRAKES

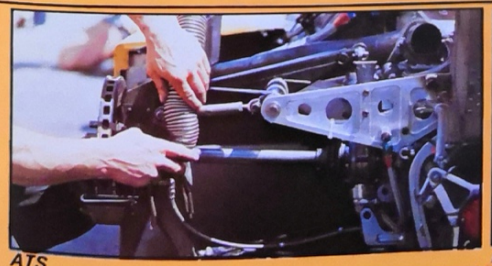
– More cooling ducts.

– Bigger brake discs.

Tyrrell

Ligier

Lotus



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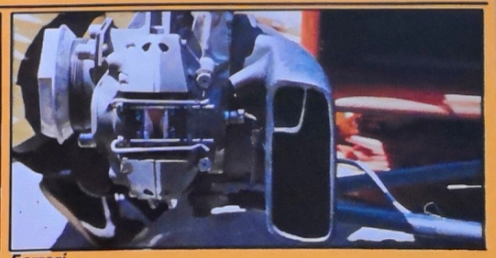
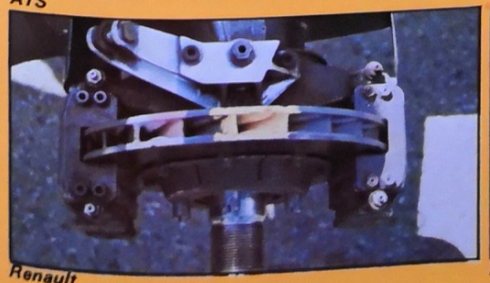
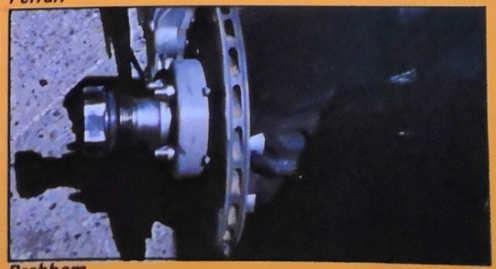


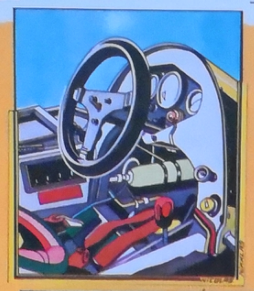
Ferrari



Renault



Brabham



MARLBORO MCLAREN

McLaren-Ford M 29 C/2 :
John Watson (GB)
McLaren-Ford M 29 C/4 :
Stephen South (GB)
McLaren-Ford M 29 B/1 :
Spare.

For his Grand Prix debut with the McLaren team, Stephen South has a slightly modified new car. The monocoque had been altered at the front. This car replaced that which was damaged at Kyalami during Alain Prost's accident. The Frenchman was at Long Beach, but his wrist was still in plaster.
Teddy Mayer's team are still having trouble with the M29 C which is not really competitive. Watson complained of understeer going into the corners, and then oversteer coming out of them, as well as a lack of straight line speed. On Saturday morning, with readjusted suspension, the car was better, yet it had got worse again by the afternoon. Furehermore, John had to qualify in the spare car after his race car's engine failed.
As for Stephen South, he was making his Grand Prix and Long Beach debut at the same time, and it wastn't fast enough to qualify. Various drivers complained about being held up, but perhaps it was as much the car's fault as Stephen's. The M29 is scarcely competitive. McLaren have to get their new car built, even though certain members of the team prefer to learn more about the M29 and ground effect. But it is the third uncompetitive McLaren since the M23 with which the English team won the World Championship.

Extra Lockheed brake fluid reservoir for the 312 T5.

FERRARI SPA

Ferrari 312 T5/045 :
Jody Scheckter (ZA)
Ferrari 312 T5/046 :
Gilles Villeneuve (CDN)
Ferrari 312 T5/042 :
Spare.

The Ferrari team had done a lot of work on the cars at Fiorano since South Africa. A new and more efficient skirt system allowed Villeneuve to gain a whole second during testing at Fiorano which caused the Italian team to have great hopes. Furthermore, their 12 cylinder engine should theoretically have had an advantage at Long Beach.
The team's engineers reckoned that they had found the source of their engine trouble which was so apparent at Kyalami. Remember that Scheckter retired at Kyalami with a broken engine. But when this engine was run on the test bed, it worked perfectly well which rather puzzled the men at Maranello. During testing at Fiorano, the same thing happened to Villeneuve. The engine wouldn't work in the car, but worked perfectly on the brake. It was subsequently discovered that a plug lead was causing an electrical fault and therefore a short circuit in the electrical system.
Apart from new skirts, the Ferraris were also fitted with new ducting within the side pods. The T5s were also fitted with new front wings as well as an extra Lockheed brake fluid reservoir.
However, practice at Long Beach again revealed that the T5s were slower than the T4. Villeneuve joked that he was amused by the fact that his car slid all over the place all of the time. In fact his car lacked traction as did Scheckter's. On the engine front, there was a single breakage on Villeneuve's car on Saturday morning. The mechanics managed to change it in one hour. Scheckter had to use his spare car during the final qualifying session because his race car's engine had lost power.
Villeneuve set the best time during the warm-up with Scheckter fifth quickest. Could this be a replay of last year when they had a methodical practice session, then proved to be quick on Sunday morning and unbeatable that afternoon during the race ? They were certainly better during the race than they had been during the preceding races this year, although they never actually disputed the lead. Villeneuve fought hard up to third place, overtaking Patrese, Arnoux and Depailler. But on the 39th lap, he waved his arm in front of the pits, indicating that he was about to stop and change tyres. He restarted in eighth place but retired later with broken transmission. Scheckter dropped to be back of the field because of the accident on the fourth lap and a change of tyres. However, he climbed back to fifth place but further improvement was thwarted by Watson.

LIGIER GITANES

Ligier-Ford JS 11/15 - 03 :
Jacques Laffite (F)
Ligier-Ford JS 11/15 - 04 :
Didier Pironi (F)
Ligier-Ford JS 11/15 - 01 :
Spare.

The Ligiers arrived at Long Beach in their more suitable original specification following the appearance of the aerodynamic version at Kyalami. On Friday, Laffite hit the wall lightly during the first qualifying session which meant that he had to use the spare which suffered electrical trouble. Didier Pironi, on the other hand, said that he was perfectly delighted with his car's handling and he turned out to be fastest of the session. Some poor qualifying tyres caused them to be further down on the grid than they expected the next day. Neither driver managed to really shine during the race. Jacques retired following a punctured tyre, and Didier finished sixth after a pit stop to change a flat tyre.

CANDY TYRRELL

Tyrrell-Ford 010/1 :
Jean-Pierre Jarier (F)
Tyrrell-Ford 010/2 :
Derek Daly (IRL)
Tyrrell-Ford 010/3 :
Spare.

There were scarcely any modifications to the still new Tyrrells. This time there were three of them for a new car had been built up as a spare, so there was no 009 present. They came straight from Nogaro where they'd been testing improved brakes. Jarier rated his chances highly. He was disappointed though, for during practice, his car lacked traction. He was happy again after Sunday morning's practice for his car handled well on full fuel tanks and race tyres.
As for Derek Daly, he too was a little disappointed during practice. *« The car is going well, I've just a few adjustments to make, but that's what is worrying me. I would have prefered to have one big problem, and then once that had been sorted, the car would be really competitive. Maybe we haven't enough downforce. »*
Jarier got himself eliminated during the fourth lap accident so Ken Tyrrell's chances rested with Daly. He'd done well early on, being in seventh place until the brakes began to fade and then Derek slipped back through the field, finishing among the backmarkers without even having stopped at the pits.

RENAULT ELF

Renault RE 23 :
Jean-Pierre Jabouille (F)
Renault RE 24 :
René Arnoux (F)
Renault RE 22 :
Spare.

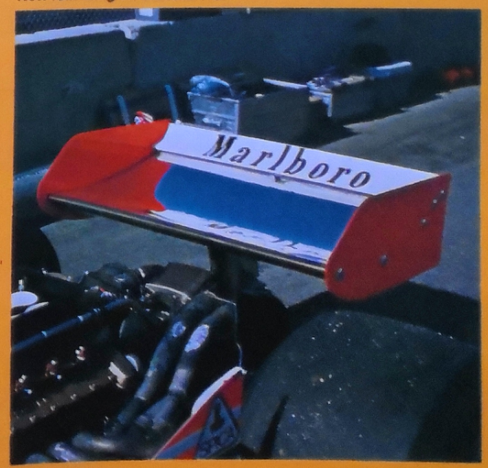
There were a number of new technicalities to be found on the Regie's cars. René Arnoux had a completely new RE 24 which, like the other two cars, was fitted with Brembo disc brakes. Jabouille's RE 23 had integral bodywork around the rear end of the car, derived from the engine bodywork tested at Le Castellet before Kyalami. It was also fitted with a wider rear track which was intended to improve traction. Finally, the spare car had an hydraulic assisted brake system. Arnoux had already tried this system during testing at Le Castellet and it was he who continued to test it during the first unofficial session at Long Beach.
« Theoretically, the advantage is that one has to push the pedal a lot less hard to achieve the same amount of braking », explained René. *« And that is supposed to relieve the driver somewhat. Trying this system during a Grand Prix is quite a good idea because one tries a lot harder than during private test sessions. At the end of the session I didn't have any brakes left at all so we're going to have to make this system reliable. »* The system should be used again soon, even though it adds around seven kilos to the car's weight.
Jabouille and Arnoux were both to experience brake trouble on the first day because of cracked brake discs. For that reason the Brembos were discarded even though they'd worked well during private practice, and normal discs were used thereafter.
Arnoux went out on the track at the most opportune moment on Saturday and came back with a front row time, while Jabouille was again out of luck. Just when the track was at its quickest, Jabouille's mechanics were bleeding his brakes. Furthermore, it seems that he was never able to set up his car properly, even though the new bodywork should have worked well for him.
Jabouille's race was an exact reflection of his practice : brake tróuble and sporadic pit stops — four times in order to bleed the brakes. René was careful at the start of the race but was then handicapped slightly less than Jean-Pierre by his brakes. He was as high as third at one time, but then dropped back and was further delayed by a punctured tyre.

ALFA ROMEO AUTODELTA

Alfa Romeo 179/3 :
Patrick Depailler (F)
Alfa Romeo 179/4 :
Bruno Giacomelli (I)
Alfa Romeo 179/1 :
Spare.

Ever since they arrived in Formula One, Alfa Romeo have done everything possible and tried hard to get to the front of the grids and races. The Italian team had worked hard since Kyalami. Their times during testing at Nogaro were proof of the fact, although it still caused a certain amount of surprise. There were a number of noticeable modifications to the cars. They were fitted with different front nose fins. The front part of the chassis had been modified to improve driver safety and also to improve the front nose fin mountings. New side pods and rear wings were also fitted. The rear suspension geometry had been modified on Depailler's car using inclined lower wishbones. However, the wheelbase was still the same, contrary to what had been announced, due to lack of time.
Patrick Depailler wasn't able to drive his race car as he wished on the first day of practice as its engine wasn't firing properly. Consequently he had to use the spare. It was remarkable that during this first day of practice, the brakes didn't heat up sufficiently.
The next day, Depailler put his race car on the second row of the grid while Giacomelli complained of a small understeer problem in the slow corners. The Italian also lost time due to a broken exhaust. Giaco had two accidents during the race, although that's not to say that either of them were his fault. Depailler retired with broken suspension.

New rear wing on the Alfa 179.



SAUDIA WILLIAMS

Williams-Ford FW 07/07 :
Alan Jones
Williams-Ford FW 07/05 :
Carlos Reutemann (RA)
Williams-Ford FW 07/06 :
Spare.

There wasn't a lot new on the Williams, but they had a totally fruitless weekend at Long Beach. The English team had got Reutemann to do the testing after Kyalami as Jones was ill with pleurisy from which he'd scarcely recovered by the time Long Beach came around. There was only a new rear wing which was never actually fitted. Reutemann had to use the spare on Friday having hit a wall with his race car. Jones drove the spare on Saturday, alternating with his race car, in order to test various set-ups.
The warm-up was catastrophic for Frank's team. Jones's engine caught fire forcing the Australian to start the race in his spare. Reutemann had a halfshaft break on his car. The same thing happened to him during the race. Jones, on the other hand, was heading towards a certain second place when he and Giacomelli collided while lapping the Alfa.
The Argentine Grand Prix and the Williams's complete domination now seems a long way away. Frank's team are waiting impatiently for the new car which is due to appear at the end of the European season.

Higher roll-over bar on Reutemann's Williams.

UNIPART ENSIGN

Ensign-Ford MN 180/01 :
Clay Regazzoni (CH)
Ensign-Ford MN 180/02 :
Spare.

And to think that Clay was heading for his best result of the year. It hadn't really started that well. Although the car had gone well during testing at Riverside the previous week, Clay was very much surprised to find that it understeered at the entry to the Long Beach corners. The spare did the same thing. Testing various different springs partially eliminated the problem, though not completely. Clay was nevertheless heading for a fine fourth place when he suffered his dramatic accident.

Another broken upright on the Shadow DN 11.

SHADOW

Shadow-Ford DN 11/02 :
David Kennedy (IRL)
Shadow-Ford DN 11/03 :
Geoff Lees (GB)

What can one say about the Shadow team who are going through such a bad time currently ? The cars aren't well prepared and are scarcely quick. Geoff Lees pleasantly alleged a diplomatic illness and chose not to drive at all. Kennedy did his best but broke various suspension parts. *« For a moment, I figured on the grid, »* he said. It was little satisfaction really. Chuck Graemiger's car still isn't finished. Will it ever be seen ?

ESSEX LOTUS

Lotus-Ford 81/02 :
Mario Andretti (USA)
Lotus-Ford 81/01 :
Elio De Angelis (I)
Lotus-Ford 81/03 :
Spare.

The novelty at this Grand Prix was the Lotus gearbox which has been described in our technical article by Giorgio Piola on page 50. This new gearbox has meant a three inch longer wheelbase and a completely new rear suspension. There was also a new exhaust system in new material.
Colin Chapman's team didn't have a good weekend in spite of a promising second quickest time set by Elio De Angelis during the first practice session. The drivers' main problems resided in the roadholding which seemed poor because of the new rear suspension. The straight line speed was also too low.
Mario used the spare on Saturday (fitted with old suspension) in order to set his best time, while Elio drove his team leader's car, a side pod having broken on his own.
Both cars were involved in accidents during the race and they weren't on the track for long. It's highly likely that the 81s will be fitted with modified rear suspension at Zolder, as an interim until the 86.

OSELLA

Osella-Ford FA1/01 (2) :
Eddie Cheever (USA)

The second Osella chassis appeared at Long Beach following the destruction of the first at Kyalami. This car is lighter than the previous one at 603 kilos. There are various modifications including air starter, a stiffer rear end, and side pods that are 4 cms bigger. Having said that, the car still hadn't been wind tunnel tested, although that's due shortly. Practice was delayed by dirty fuel on Friday which damaged the injection and then caused the engine to break. Furthermore, Cheever had understeer in the slow corners which he couldn't cure. Nevertheless, the Osella slowly made progress and qualified for the second time running.

ATS WHEELS

ATS-Ford D4/01 :
Jan Lammers (NL) :

ATS had their day of glory on the second day of practice when their diminutive replacement driver Jan Lammers put the new D4 on the second row of the grid. The new car is a modification of the old and these are the details : the monocoque is lighter by five kilos, there's a new system of radiators, two instead of four, new side pods and skirts, redesigned rear suspension, a shorter wheelbase by 7.6 cms, and new anti-roll bars front and rear. The weight in total has been cut down by around 20 kilos. All this has been the work of German designer Gustav Brunner who is already (or again) working on a new ATS. Another...

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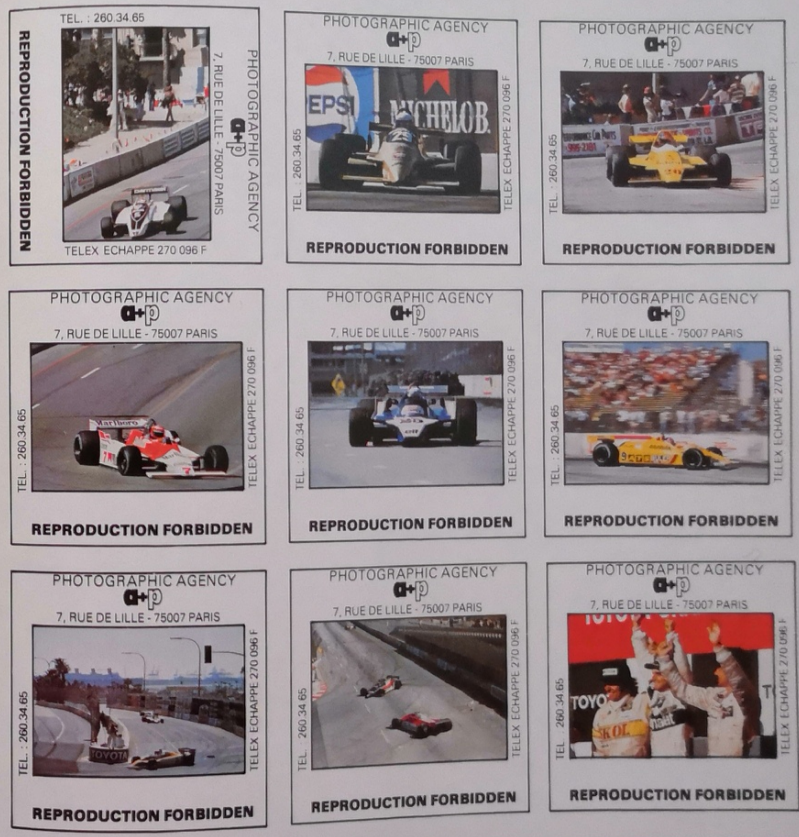

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